The recent dramatic earthquakes, that have affected Central Italy and Ischia, have spotlighted again the debate about how to intervene on existing buildings, so as to ensure both a higher security to all citizens, and a better preservation of all that information, having a historic, cultural, constructive and artistic character, enclosed within them, and, often, witnesses of local identities, strongly at risk of disappearance. This has put the academic world, as well as the productive one, in front of the umpteenth scientific and technological challenge to provide efficient and sustainable intervention solutions (capable, at the same time, of guaranteeing high levels of comfort), which have to stand comparison with the possible alternative of demolition and reconstruction.

As it is happening in the medical field for a long time, the correct declination of these two paradigms, security on one hand and conservation on the other hand, can only pass through a deep knowledge (anamnesis) of the existing artefact we have to intervene on, deciphering general characters and particularities, such as its history, its geometries, its constructive techniques, its materials, its artistic emergencies, its vulnerabilities, its instability and degradation processes. At the same time, this knowledge has to be integrated with the most modern engineering skills, in order to formulate a correct and precise diagnosis and, subsequently, identify the best therapy. Therapy that will have: to be targeted and personalized (and not a simple “copy and paste”, so fashionable nowadays), by rejecting preconceived technical solutions and borrowed from a series of cases that are often out of context; to be pursued through what constitutes the fundamental step for every intervention, that is the project, especially in the care of its constructive details, which assume a fundamental importance not only for its effectiveness, but also for its sustainability and durability over time.
In this framework, the two instances of security and conservation should not be declined, as it has often happened in the past, with a Manichean approach, as in antithesis, in opposition; rather, they should be considered as dialectics, in a continuous reference that, recognizing and valuing differences and contradictions, leads, case by case, to their optimal synthesis, rather than to their (risky) compromise. It is self-evident, for example, how the “culture of reinforced concrete”, that is, the excessive confidence in technology and the use of modern materials, and the lack of knowledge of the construction techniques of the past, has often not only deleted the memory of the renowned constructive tradition of our artisans enclosed by the various elements, but it has also led to intervene in an way often excessive and wrong on many existing buildings, introducing vulnerabilities instead of filling them. An obvious example is the insertion of excessively rigid reinforced concrete rings and heavy tile-reinforced concrete slabs placed, most of the times, on poor quality masonry, by often replacing the whole existing wooden structures.

The two current 2018-issues of the magazine are inspired by these considerations and, through the provocative question “demolition and reconstruction?”, arisen in Ancona from Colloqui.AT.e 2017, by pursuing a practical approach, try to offer a series of concrete examples to each practitioner, highlighting a methodology of careful and reflective work, through which one can find the adequate synthesis between safety and conservation. Hence, here it is the way to increase and enhance the performance of each constructive element, systematically exploiting its resources and acting only where necessary, so that the new reuse could born from the intrinsic “potentialities” of the existing building itself. From this point of view, numerical calculations share, like other tools, support and guide choices, but are far from becoming a goal.

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