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MODERN EARTHQUAKE CULTURE? STANDARDS, CODES AND ROUTINE METHODS

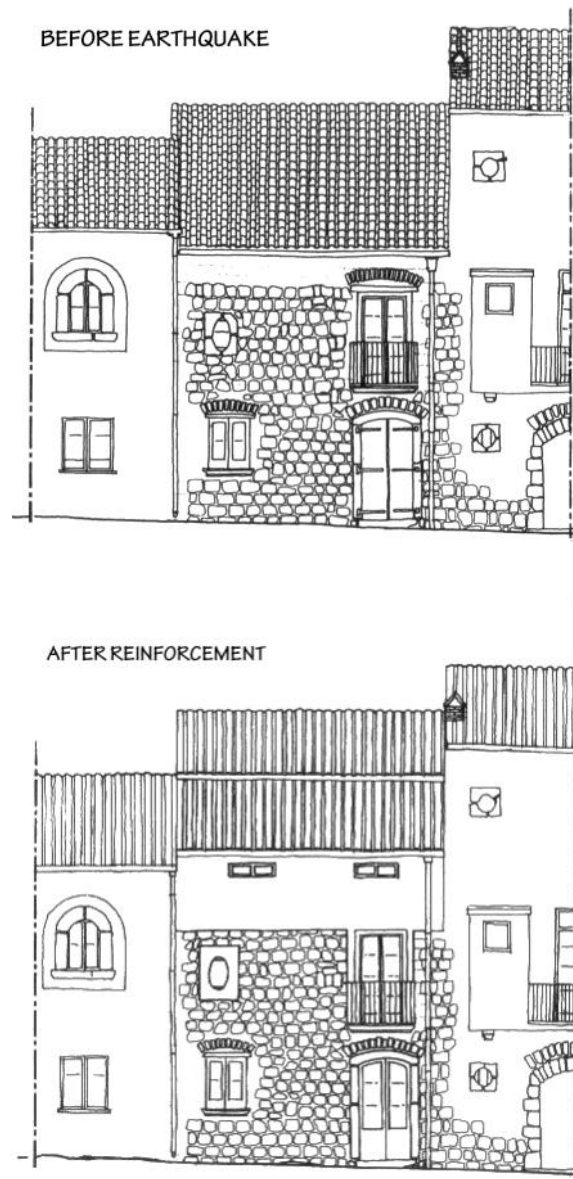
It makes little sense nowadays to speak of a popular earthquake culture. It is in effect reduced to formulae, rules and methods laid down by current law and is thus a matter purely for the technical experts. But they do not have as much specialised training as one might think.

With a few rare exceptions, training and information on earthquakes has so far been given only in emergencies.

The official guardians of modern earthquake culture thus acquire it through pressure of necessity and have to present themselves as "experts" within a very short time: that is to say they have to understand, or rather they have to know how to apply, standards and methods which have often been dictated by emergency themselves.

Technical specialists also have to apply town planning laws and general technical standards prepared on the basis of the most usual "models" of construction. Clearly these cannot take account of the different types of materials and building methods existing within one and the same building fabric or, as in the case of San Lorenzello, within one and the same building.

Given, furthermore, that there is no specific tradition of "appropriate methods" for preserving minor historic buildings, a certain methodology has gradually become established which may, paradoxically, increase the vulnerability of the system.



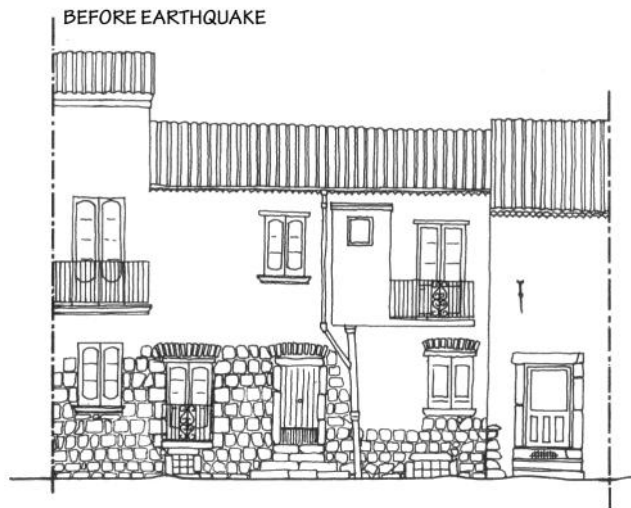
For example, the efficiency of reinforcement measures at resisting earthquakes is checked on the basis of standards which are derived from those for reinforced concrete structures. And given that the construction method for these buildings requires the structures to be quite separate even though they may be contiguous, scrutiny of masonry structures is - and must be - carried out on every unit, without the need or ability to analyse existing correlations with contiguous buildings.

Another example: reinforcement measures required under the current building codes are borrowed directly from experience with "monumental" buildings, in other words buildings invariably built by experts from plans, using the best materials of the time and correct and often sophisticated building techniques. So it is not "appropriate" to apply the same criteria to structures built using mixed and/or unfamiliar methods and a variety of materials which are often of poor quality. Furthermore, such criteria entail costs which are not compatible either with the specific value of vernacular architecture or with the financial resources (and attitudes) of the individuals concerned.

Town planning, furthermore, sometimes produces unwanted effects, even though its aim is to protect items of cultural value.

For example, rehabilitation plans often consist of a classification of buildings, together with standards which merely state what work can be done on each building in relation to its "value", without ever saying "how" it should be done.

Because there are no checks on whether typical measures are consistent with the features of the living fabric - not only aesthetically, technically and



structurally but also economically - the specific culture of those who carry out the measures goes to waste. The system's technical component - engineers and workmen - thus has no chance of controlling the quality of the measures taken.

Added to that is the fact that the scant attention paid by town planners to the economic and social repercussions of protective regulations which determine how the system behaves when plans are put into operation results in a regrettable scenario in which all those involved in rehabilitation are led along the wrong track. Local politicians who often adopt the plan more to enhance their own image than to encourage rehabilitation; town planners, who lay down strict standards to show how much they care about protecting buildings; property owners, who end up seeing the rules as a constraint on their (perfectly legitimate) aspiration for improved amenities; technical specialists, who see the plan as an instrument which reduces rather than increases work opportunities: all of them work together to ensure that the principles of rehabilitation, the standards and the codes are formally respected, even though no culture emerges as a result.

