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ca'redivivus: early RC housing and urban seismic risk

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Sustainability issues have formed the public idea that a kind of fortification leading to intensive development of towns inside an area delimitated within the surrounding nature is necessary. While in the majority of cases this means upgrading existing buildings to changed living standards, earthquake prone countries face the challenge given by safety standard requirements. The project will contribute to the documentation of the reinforced concrete housing buildings of the Modern Movement, by analysing the distribution of this building type, with comparative studies regarding the differences in the architectural language adopted for as well as changes induced by preservation requirements on buildings of this type in areas of high/low seismicity, and their determinant factors (earthquake hazard, urban development policies); existing attempts and distribution determined need for seismic rehabilitation; the time when this type of construction reached the respective countries, and the subsequent relationship to codes and the earthquakes affecting; the suitability of certain methods for buildings situated in different ranges of cultural value. A building-typological study was performed, and criteria in order to facilitate the dialogue among the actors in assessment developed. Out of those investigated so far, Romania, Greece, Portugal, Slovenia, Spain and Italy are regions prone to earthquakes, to variable extent, and some shared a common housing typology in the early XXth century. Multidisciplinary research interferences are: sociology/architecture, construction-technology/architectural/economic, geophysical/urbanistic, structural/construction-technology/architecture. Results from previous research will flow into the project transdisciplinarily. The project addresses the way how to enhance the acceptance for measures towards reduction of seismic risk. Possibilities of dialogue with citizens are investigated in the research on participative aspects in decision making, using the method of documentation of examples of best practice. This project is funded under the Marie Curie Intra-European Fellowships research mobility scheme of the European Commission, contract nr. MEIF-CT-2005-009765, with a 2-years individual fellowship.