Overview of the project CONSECH20

Conservation of 20th century concrete cultural heritage in urban changing environments

Cristiana Nunes, Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences

Keywords: historic concrete, social interest, heritage values, maintenance, reuse

CONSECH20 is a European research project supported by the JPI CH Heritage in Changing environments programme developed from 2019 to mid-2022. The project aimed to develop approaches for the conservation and protection of the 20th century heritage concrete buildings against the ever-changing urban impacts, considering both technical and social aspects.

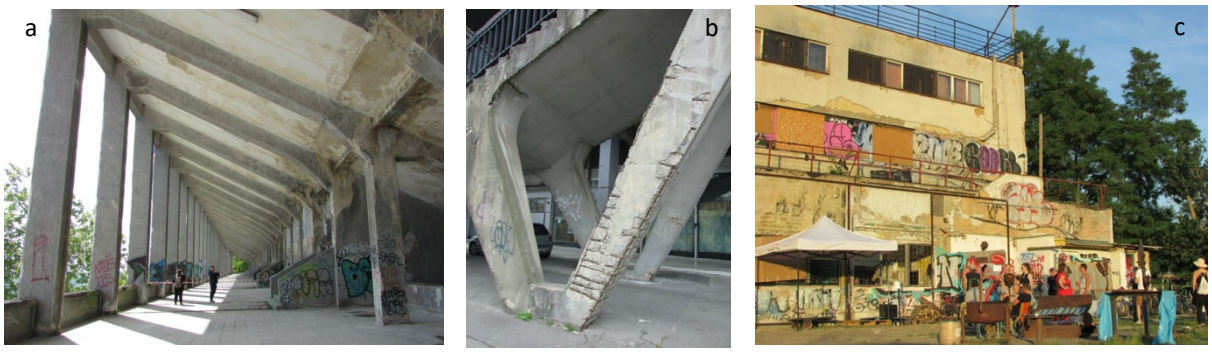
In general, the rehabilitation of urban spaces, which are rich in heritage values, has been almost always focused on the building to be preserved, relegating to a secondary level the social functions and dimensions of support to the local communities. Defending the tangible heritage values while forgetting their necessary relation with the social dimension and the intangible sense of heritage has contributed to the abandonment and consequent degradation of buildings.

The CONSECH20 project aimed to support better maintenance practices by promoting public awareness and interest in this recent heritage. It focused on historic reinforced concrete constructions built mostly until 1960. Focus was given to buildings with social interest, in the sense of bringing people together, to strengthen the link between society and the 20th century architectural heritage.

The project used case studies of concrete buildings in four of the participating countries: Cyprus, Czech Republic, Italy, and The Netherlands. The assessment of the case studies encompassed the analysis of the construction history, usage history, state of conservation, and heritage values. Both constructions that need conservation or are abandoned and those that have undergone interventions and are functional were selected to assess the trends in maintenance, repair, and reuse (see figure below). The methodology used is reflected in the project's online interactive open-access database that the public can use to document more concrete heritage buildings.

Each consortium partner has developed digital storytelling videos about concrete cultural heritage in each country for engaging communities in promoting heritage and fostering partnerships with cultural heritage institutions. The public is encouraged to make their own videos and upload them to the online database.

Conservation proposals for selected buildings needing repair were made based on the in-depth analysis of their history and materials. The proposals are also available on the project database and website and can be implemented by the authorities responsible for the buildings.



Examples of case studies in the Czech Republic: a) Abandoned structure: view of the Strahov stadium in Prague during an opening day for visitors; b) Detail of the Strahov stadium showing corrosion of the reinforcement due to inadequate concrete cover and lack of maintenance; c) Building in need of conservation: view of the Fuchs restaurant in Prague during a local community party.