

# Summary

Earth is probably the most common material to be found in nature. Unsurprisingly, ground, soil and gravel soon found their way into architecture in almost every culture and community on the planet. Its use as a building material left traces in remarkable structures, displays of know-how, techniques and art. Its future, nevertheless, is uncertain. Of the 56 sites included in the UNESCO World Heritage in Danger List, a fifth are historic cities built with earth. As the number of sites included in the List every year is growing, so is the number of included historic earthen cities, especially in the three geographical clusters of Middle East, Northern Africa and Latin America. The thesis develops on this evidence, investigating the perspectives of conservation and risk management for a comprehensive understanding of the threats affecting historic earthen cities.

The theoretical framework is founded on three main subjects. The first is the identification and evaluation of risk factors on earthen urban heritage, with particular attention on the historical urban landscape transcalar approach. The second is preventive conservation and the analysis of the benefits it can bring to heritage conservation and enhancement. The third is management of the fragile earthen heritage sites, focusing on participatory approaches in accord with international guidelines - such as the Faro Convention -.

The starting point is a critical study on the historic earthen cities in the World Heritage in Danger List through UNESCO-published materials and relevant academic publications; the aim is to better understand the most-common risk factors and to classify them by occurrence. Then, some selected case studies from the List and from the previously defined geographical clusters are further analyzed by creating risk scenarios. As a comprehensive description of the risk factors affecting the World Heritage sites, deduced by documents and literature reviews, and enriched by semi-structured interviews to local stakeholders - acting

as informed interviewee - they allow a comprehensive contextualization of the heritage sites.

After the risk scenarios are established, a risk-management methodology is applied. The selected one is ICCROM, CCI/ICC (2016) A Guide to Risk Management of Cultural Heritage, an adaptation of the ABC Method of risk-management. As an innovative hypothesis, the methodology is integrated by adding the risk-scenario approach and introducing a time factor in the risk-assessment, thus categorizing the risk factors by feasibility rather than by severity. The expected outcome of the methodology integration is the evidence that inadequate management risk factors are predominant and more feasible to tackle in emergency/risk contexts.

New management, or more broadly, governance paradigms are proven necessary. The thesis investigates collaborative governance practices, ranging from customary community practices of preventive conservation to academia-sponsored outreach and involvement activities, with the conservation campaigns in Cuenca, Ecuador as an exemplary case study. The thesis follows the hypothesis that, in risk-driven contexts, it is necessary to involve local communities and other unusual actors in heritage management.

The final objective is the elaboration and redaction of a collaborative risk management and preventive conservation protocol, an operative document based on “learning” from the various case studies, that can be adapted to other historic earthen cities.