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THE SPECIFICITIES OF MANOR HOUSES AS BUILT HERITAGE: A CASE STUDY

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KEYWORDS: Old buildings, Manor houses, Rehabilitation works, Sustainability, Reuse, Management.

ABSTRACT

In Portugal there are many heritage buildings with patrimonial, historical and cultural values in an advanced degradation process. Generally, the manor houses and small palaces were built mostly in villages and away from areas with more population. In many cases they have areas and space above conventional ones which required extensive maintenance costs. On other hand, these heritage buildings has unparalleled architectural features and uniqueness in addition to all the wealth and associated history.

The architectonical valorization and rehabilitation works of this type of housing has generally some constraints that are not only related with their work specificities but also with other factors many others related with misunderstandings among owners, inheritance problems, lack of money for investment, and others. These manor houses and small palaces were generally occupied by affluent families whose economic and societal position ended up being lost over the years and due to changes in political regimes. However, it is possible to adapt this kind of buildings to new typologies of use, compatible and not disturbing the original occupation, such as the use for the tourism sector.

The article describes a case study that involves the surveying of constraints and other problems concerning the rehabilitation works of manor houses and small palaces. The definition of adjusted and compatible solutions are duly balanced and weighted for each case. These solutions are based on the adoption of sustainable practices that allow a certain speed and certainties in the rehabilitation works of the built heritage. Also, the rehabilitation solutions are focused on the principles of sustainability and are adjusted for this purpose using some measures and ideas of a management system to support the rehabilitation works in buildings, which was developed in a former research project.

CONCLUSIONS

The case study involves an investigation about a manor house rehabilitation works, dated from second half of eighteenth century. This heritage building is listed as bearing municipal interest property, figure 1a).

There was an exhaustive search for the conditionings and constraints to the accomplishment of the necessary works [1], looking for solutions that enhance sustainability benefits and a more efficient management [2], contrary to what often happens in similar interventions [3], figure 1b). For this purpose, the "*Management system for rehabilitation of consolidated urban centre localized buildings*" [4], here after called management system was used. The management system was applied to support the rehabilitation works of an old building (manor house), choosing solutions from this system but adapting them in a way to be compatible with building's specificities. This case study involved 39 (thirty nine) out of 50 (fifty) management system parameters, including "*project design*", "*construction works and site works*" and "*costs*" areas.

a) b)

Figure 1: a) Case Study Manor House; b) Structural solution according to existing constraints

The option for more sustainable solutions, with higher than conventional benefits, is presented in 28 (twenty eight) out of 39 (thirty nine) of the used parameters, and represents 69% (sixty nine percent) of the cases. This suggests that it is possible to balance and optimize solutions more effectively that the conventional solutions, considering pre-existing constraints, technical recommendations and solutions that promote sustainability. Furthermore, it could prove the detail, organization and weighting of the design attending by the designer's team [5], which contains important levels of information about technical aspects connected to real constraints and rehabilitation problems of the manor house studied.

Decisions related to the construction site works, as well as measures to support the construction management and planning are crucial to the success of the rehabilitation works [6]. The option for a metallic structure shortened the duration of the working time and reduced construction risk exposure, attending to the owners' priority context. Another constraint worthy of note was the scarcity available financial resources that led to the decision to build first in the structural elements and roof components to protect the exterior walls, in spite of the overall comprehensiveness of the whole project design [7].

In this sense, the management system allows great flexibility in considering project solutions integrated with realistic problems and constraints of a building with heritage value but in need of rehabilitation works. The management system could be an auxiliary to reducing failures, omissions and errors, deadlines control, improving quality level, costs control, managing risks and other unforeseen events

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