

CONOSCENZA E GESTIONE DEL PATRIMONIO COSTRUITO STORICO. LE NUOVE FRONTIERE DEL BIM

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ABSTRACT

The BIM Modeling of Cultural Heritage requires special attention, dealing with at least two completely different aspects. On the one hand, the problem concerns the elaboration of a complex and accurate model in order to provide the most complete representation of a building; on the other hand, modeling leads to a very schematic representation of a built architecture. It is not easy to define the right balance between these two attitudes, since each building requires a tailored and not a standard approach. Therefore, it is necessary to define rules to figure out which items are to be represented and which is the minimum detail level. With regard to restoration, the attention focuses on singularity and particularities of each existing architecture: it is meaningful to realize and describe accurately each part as a distinctive issue. The first above-mentioned possibility of modelling seems to be very close to this approach, but it clashes with two important aspects. The first problem concerns commercial modelling software that prefers working with predefined “families”. Though it is possible to build new families, it often requires a lot of time. The second problem is the actual adaptability of such an accurate model: in fact, it could be very difficult to link external elements to the model or use it in most of traditional BIM applications.

In this paper, we suggest a different possible approach. The proposed solution aims to give as much information as possible about the building, and, at the same time, to achieve a higher efficiency. In this way no information are lost and, at the same time, a very usable BIM model can be achieved.

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