

Digital Reconstruction Of Vernacular Traditional Houses As A Method Of Data Conservation

Heritage is our past that has been preserved for the present and it will be inherited for the future generations. Heritage authenticity is not only the physical return of the building but more importantly the emotion, memory and the resulting sense when the building is conserved. Malaysia has been a member of UNESCO's Convention Concerning the Protection of the World Cultural and Natural Heritage since 1988. A lot of effort has been put in to make sure our national heritage has been preserved accordingly. With the references and guidance of international charters, the aim and goal of all conservation projects is to achieve the authenticity of cultural heritage.

The conservation of a historical building is divided into 3 stages: Documentation, Dilapidation Survey and Building Investigation and Conservation Works. In architectural education, the study of historic buildings focuses on the first stage which is the documentation stage. The documentation stage is divided into two categories which is historical research and measured drawing. In this study, a third category is proposed: 3D modelling. 3D modelling would be used as a tool to reflect the authenticity of the building, which includes the internal spaces to enable viewers to experience the spaces in the historic building. The study is guided by three objectives: 1). To study the intangible aspects of vernacular architectural historic buildings in Malaysia 2) To translate existing 2D drawings to 3D digital modelling 3) To develop a digital library for the School of Architecture and Built Environment (SABE) to support the documentation of vernacular historic buildings. This digital library contributes to Sustainable Development Goal 4, which combines technology and information resources to be accessible for students and the public.

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