



OBSERVATION OF MONUMENTS DETERIORATION AND A TOOL TO GUIDE PRESERVATION QUALITY USING VIRTUAL REALITY TECHNIQUES

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Abstract

The lack of fund is the major problem that faces the Egyptian monument preservation, which leads to an architectural poor condition of that monument. The research suggests a mechanism use the virtual reality technique that traces the regular monument deterioration that allows the preservation to take place in proper time. Further more, this technique is useful in evaluating the quality of the preservation process. That would be achieved by building 3D virtual model before and after the preservation process and compare the changes that happened to the monument. That method facilitate a good monitoring for the monument over time as well, and documenting that monument in details regularly. The research illustrates an actual case study has been conducted under the researcher supervision. In this study two copies of virtual models have been built for “PANEHSY” tomb (Mataria, Cairo). The first copy based on the pictures taken for the tomb on the day of its discovery. The second has been built based on the pictures of the tomb after the preservation and restoration project. By applying the suggested method, the changes occurred to the tomb’s drawings and ornaments were clearly observed.



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Ivan Sutherland

. [KALAWSKY, 1993]& [LEVY, 1995] . "The Ultimate Display"



[PIMENTEL, 1995] .“Brooks’ Group of Researchers”

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“Graphics Accelerators”

[KALAWSKY, 1993] . C

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[CORBLEY, 1990] .(Change Detection Study)

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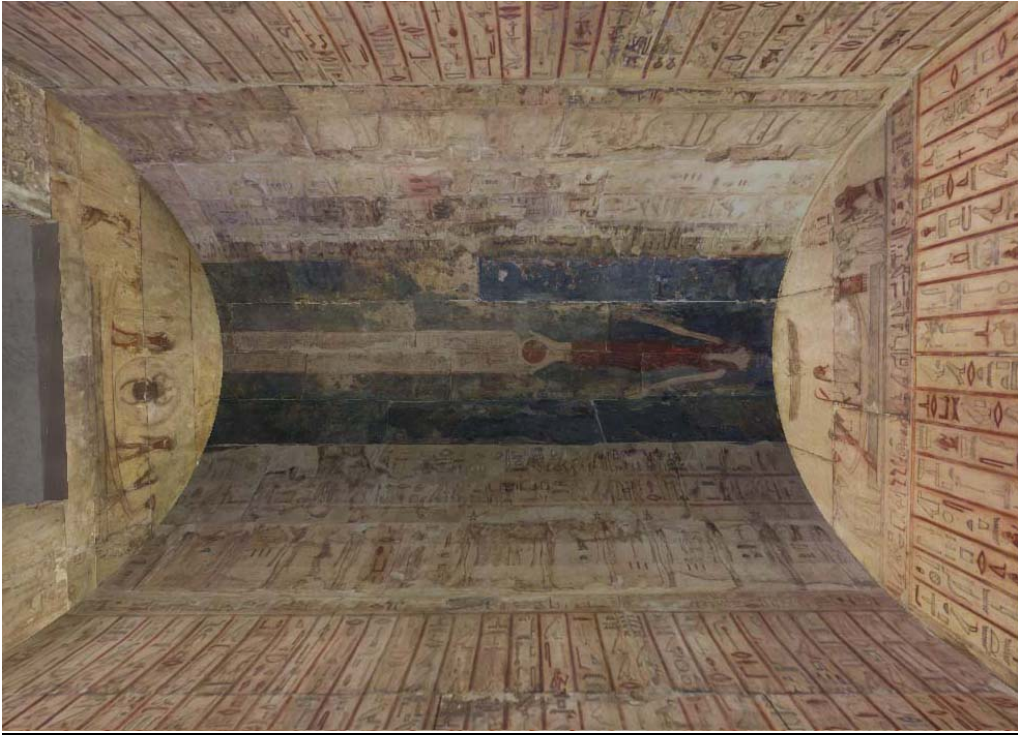
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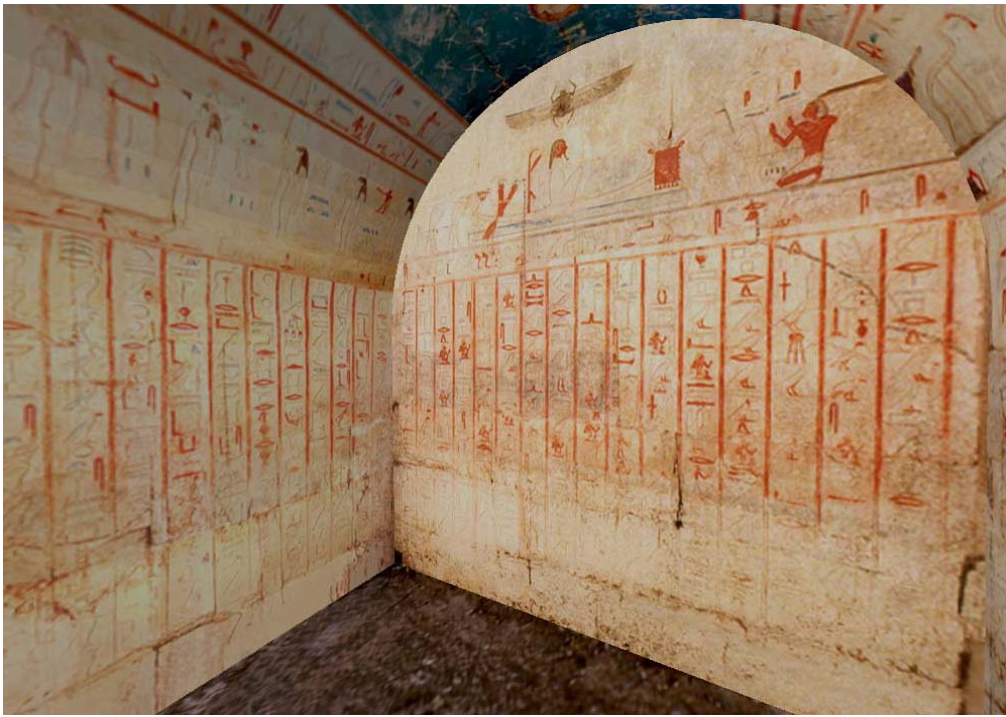
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