Study Reconstruction Of Destroyed Structural And Architectural Components In The Fifth Dynasty Tombs At Saqqara Applied On a Selected Model

A Thesis submitted for the Master's degree

Department of Restoration

Submitted by

Mohamed Refaat Taha Mohamed

Demonstrator, Department of Restoration

Faculty of Archeology - Fayoum University

Supervisor

Prof. Dr./Mohamad Kamal Khallaf

Professor of Antiquities Conservation

Vice-Dean for Education & Students

Prof. Dr./Sayed Taha Mohamed

Professor of Physics

of Solids and Nanomaterial,

Faculty of Science

Dr. / Mohamed Moustafa Mohamed

Teacher of Architectural

Restoration for Archaeological

and heritage buildings

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Abstract

The study is divided into five chapters. The first chapter is entitled “The Constructional and Architectural System of the Fifth Dynasty Tombs in the Saqqara Region”. It includes conducting the historical study and the importance of the Saqqara region and the division of its archaeological sites, in addition to studying the styles of tombs. Subsequently, we move on to studying the construction method with an explanation of the most important and famous examples of the Fifth Dynasty tombs, with a constructional and architectural analysis of the styles of these tombs in the Fifth Dynasty era. The second chapter is entitled “The Study of the Constructional and Architectural Implications of the Fifth Dynasty Tombs in the Saqqara Region”. The study was divided into three parts. First, an integrated study was conducted on the location and topography of Saqqara, and an explanation of the climatic conditions and the geological properties of the soil. Second, the building materials used in the construction of the Fifth Dynasty tombs are explained. Finally, all the structural and architectural implications of the Fifth Dynasty tombs of Saqqara were studied. The third chapter is entitled “Principles and Standards for Reconstruction of Collapsed Constructional and Architectural Components”. It deals with the principles and standards for reconstruction of the constructional and architectural components. It also deals with the procedures followed in the process of rebuilding ancient tombs in accordance with the most important international charters and laws for reconstruction. The fourth chapter is entitled "The Analytical and Experimental study of Reconstructing the Constructional and Architectural Components of the tomb of Queen Khenut in the Saqqara region. This chapter includes the materials and methods used in the restoration of the tomb of Khnout in Saqqara. It also mentioned the general characteristics and results of the different methods of examination and analysis. Finally, it mentioned the experimental study that was conducted to select the most appropriate building materials for use to rebuild the tomb. The fifth chapter is entitled “the applied study for the restoration and reconstruction of the collapsed constructional and architectural components of the tomb of Queen Khenut in the Saqqara region in light of the international conventions for restoration and maintenance”. Historical studies of the tomb were carried out, and the surveying and architectural operations were signed. The chapter mentioned all aspects and factors of damage affecting the tomb in addition to studying the nature of the soil and the distribution of loads. Finally, the proposed plan to complete and rebuild the structural and architectural components of the tomb of Khnut in Saqqara was discussed in light of the international conventions for restoration, maintenance and practical application inside the tomb.

Translated by FUCLT
Director,

Dr. Naglaa Saad Mohamed Hassan