

Develop new, sustainable treatments for the tears and missing parts of Pharaonic shroud from Ahensia excavation

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Abstract

This paper deals with a new methodology for consolidation of crumbling archaeological shroud by adding inner layer within the missing parts which is weakening the whole structure of the shroud as time goes by, so this layer was suggested to be a hardener piece, to support the brittle edges of these holes, and prevent the bleeding of yarns from cutting warp threads. This layer was made of meaningless yarns separated obviously from the object. The fragments of the pharaonic shroud were found in "magna" one of the excavation sites in ahensia beni suef, Egypt.. we have no specific date for manufacturing, but it may be dated to the first intermediate period " nine and ten dynasty"during which Ahensia was the capital of Egypt, and lots of tombs were discovered there related to this period, many mummy shrouds were studied theoretically, as small pieces can carry meaningful information and technical point of views by which the shroud performed.

Scientific procedure was followed for treatment of the piece, beginning with identification of raw material and its state of deterioration which performed by stereo microscope ,SEM and colorimetry measurements, to get primary view about the nature of the object, way of performance , and the state of damage. The results reveal that the object was made of raw linen, indicated to its bad state of damage, dryness yarns and physical changes in its properties, color measurements refer to the dark regions existed all over the pieces as a result of mummification materials, and the yellowish color of the whole linen fiber and the progress achieved after cleaning. Mechanical, chemical cleaning by appropriate brushes and organic solvents were made, results were acceptable especially after washing the piece with moderate soap and distilled water, finally completing the missing part with adding layer of grinding natural fibre, mixing with paraloid B72 dissolving in tuluine 10% was evaluated. Then Fixation on natural linen stretched on wooden frame was done carefully by zigzag stitches. Archeological and a technical study was discussed.

Keywords

linen, analysis, examination, restoration, consolidation.