Revealing the Manufacturing Techniques of the Leather Scale Armour of Tutankhamun by the Assist of Conservation Procedures

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Abstract : This paper discusses and reveals the manufacturing techniques of the leather scale armour of Tutankhamun. This armour was in critical condition and went under many conservation procedures as it suffered from some serious deterioration aspects including fragmentation. In addition, its original shape was lost, the leather scales were found scattered in the box and separated from the linen basis, and hence its outlines were blurred and incomprehensible. In view of this, the leather scale armour of Tutankhamun was desperate for urgent conservation and reconstruction interventions. Documentation measures were done before conservation. Several re-treatable conservation procedures were applied seeking for stabilizing the armour and reaching sustainable condition. The conservation treatments included many investigations and analyses that helped in revealing materials and techniques of making the armour. The leather scale armour of Tutankhamun consisted of leather scales attached to a linen support. This linen support consisted of several layers. Howard Carter assumed that the linen support consisted of 6 layers. The undertaken conservation treatments helped in revealing the actual number of layers of the linen support as well as in reaching the most sustainable condition. This paper views the importance of the conservation procedures, which were recently carried out on Tutankhamun's leather scale armour, in identifying and revealing all materials and techniques used in its manufacturing. The collected data about manufacturing techniques were used in making a replica of the leather scale armour with the same methods and materials.

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