

K1058 Condition Report

Conservation Started: 8/4/2013

Conservation Finished: 15/4/2013

Conservator: Deborah Magnoler

Time Taken: 10 hours

Including digital photography, report, conservation and packing.

Weight before: 6.60g

Weight & measurements after conservation:

K1058: weight: 3.75g L:32mm, W:15mm, T: 2mm

K1058b (now K1946): weight: 0.18g L:8mm, W:6mm, T: 1mm

K1058(now K1947): weight: 0.69g, L:24mm, W:25mm, T:0.2mm

X-ray: L74

Catalogue number: 181

(K1058b filigree decorated sheet renumbered to K1946; K1058c gold sheet hilt-plate renumbered to K1947)

Digital photography:

Taken with a Canon EOS digital camera under daylight bulbs and Photomicrographs taken using Keyence VHX-1000 3D digital microscope with LED and/or fibre optic lights, 20-200x magnification.

Annotation on any of the storage bags or boxes: SSH09 BM1971 1001 M8 Gold 30/7/09

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Although found within the same lump of soil and given a unique accession number, this is a group of three objects. They are all different and apparently not associated. The group is formed of:

K1058a: One narrow collar decorated with garnet cloisonné. The pattern is made of interlocked, stepped triangular garnets. The collar is divided vertically into fields containing 6 cells each. The separation is made by plates of plain gold. The back is plain. The backing foils all appear to be made of gold and, based on what is not obscured by clouding behind the garnets, appear to have a standard pattern.

K1058b (now renumbered as K1946): One fragment of a fitting decorated with fine filigree scrolls, fine beaded wire borders and plain wire arranged in a herring-bone pattern along one edge.

K1058c (now K1947): One gold fragment, possibly of a plain hilt plate, with a partially surviving rivet hole

Associated Objects:

Pre-Conservation Condition: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

The three objects were contained in the same soil lump. Most detail was obscured from view. See post treatment report for details.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Study

Aim: Total cleaning

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, water on garnets, cotton wool swabs, cocktail stick, Paraloid 15%

The granular soil on all sides the was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS.

A number of garnets and one exposed backing foil required consolidation (see photomicrographs); Paraloid B72 (ethyl methacrylate copolymer) 15% w/v in acetone was applied with a natural bristle brush. Care was taken not to flood the back of the garnets with consolidant and, where possible, the consolidant was applied between the surface of the garnet and its adjacent cell wall to create a bridge or mechanically reversible attachment.

Where paste was visible inside cells without garnets or foils, it was left in situ. If the removal of soil was going to cause the de-stabilisation of a garnet or foil, the soil was not removed.

The paper K number was adhered to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object. A strip of Tyvek (spun bound polyethylene fibres) was used as a cushion for the object and to help lift it out of the foam.

Post-Conservation Condition/Findings:

K1058a: The garnet collar is bent, some of the cells are disrupted and a number of the garnets are shattered, missing or partial. After soil removal some of the garnets fragments were so precarious within their cells that a decision was made to consolidate them in order to avoid loss (see photomicrographs for location of consolidation). **This object is still very fragile and should be handled with care.**

K1058b: the filigree fitting is incomplete and bent. Some of the wire strands are suspended and at risk of being bent and broken.

K1058c: the hilt plate fragment is bent and twisted, with no loose parts, but it's so thin that any form of compression should be avoided.

Key Features:

- Three objects: one cloisonné collar, one filigree fitting, one hilt plate

Samples:

1. soil – all sides
2. paste from one of the central cells of K1058a
3. garnet fragments found within the soil of K1058a