

K1136 Condition Report

Conservation Started: 12.5.11

Conservation Finished: 17.5.11

Conservator: Deborah Magnoler

Time Taken: 7 hrs

Including digital photography, report, conservation and packing.

Dimensions: (L) 76.5 mm (W) c.68 mm (D of metal) 3 mm

Weight before: 11.42g

Weight after: 9.33g

Catalogue number: 365

Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

Annotation on any of the storage bags or boxes: SSH09 BA1971 Sf 497 M5 1001 13/08/09

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

A gold and garnet object, probably a sword plate. There are 27 garnets still in situ. Many of the cells are empty and/or deformed, but the object may have had two rows of approximately 26 garnets each running along the edge on each side, the garnets have all the same rectangular shape, measuring approximately 1.2 x 3 mm. The surviving end features a circular set decorated with a double row of filigree wire, which may have originally housed a stone, and which is now torn and distorted. There is evidence of it being composed of at least two layers of gold sheet and there is at least one evident X mark incised by a sharp point at one of the broken ends. Other marks in the shape of a series of small regular dents on the surface could be due to use or pressure against an associated object. Joint lines are visible where the gold sheets overlap. The bright yellow colour of the gold would indicate it high purity, but there is localised darkening and staining of the metal (mostly black and red) which may have been caused by association or leeching of alloyed metal.

Associated Objects: probably K 1150 and a similar whole plate on exhibition in Stoke

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

The object is partially covered by a compact layer of soil. The object has overall lost its original shape (presumably a sword plate), the metal has been bent and torn. Most of the garnets have been lost and their cells broken and deformed. There is no obvious evidence of any considerable modern damage. Some of the garnets are unstable within their cells.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Analysis/ Study

Aim: Total cleaning/ Stabilisation

Materials: Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water on garnets, IMS on metals

The granular soil on the exterior/interior surface 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.

Five garnets and a backing foil on the inner side required consolidation; Paraloid B72 (ethyl methacrylate copolymer) 10% w/v in acetone was applied.

The paper K number was adhered to the interior surface with Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a fine paint brush.

A new storage box padded with white polyethylene foam was constructed to house 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:

An X mark at one of the broken ends.

XRF analysis of the object will be performed at the Cardiff laboratories.

Samples:

1. Soil from exterior