

K1069 Condition Report

Conservation Started: 17/04/2012

Conservation Finished: 18/04/2012

Conservator: Cymbeline Storey

Time Taken: 4.5 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 55mm (W) 16mm (D) 10mm

Weight before: 7.94g

Weight after: 7.82g

Catalogue number: 570

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 and after.

Annotation on any of the storage bags or boxes: On bag: BA 1971, SSH09, 1001, M11, 163 (in a triangle), 30/7/09

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

Silver strip with zigzag and straight niello channels in a geometric pattern. The strip has a silver gilt border with four intact and one partial rivet holes.

Associated Objects: TBC

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

The object is bent. The top edge is finished and the left edge might be finished (TBC); all other edges are break edges. Break edges appear to be old and are partly covered with soil. The silver is heavily tarnished; the silver gilt border is moderately tarnished.

The left edge of the object is quite straight. Either it is finished or deliberately cut. Soil removal is necessary to gain further information.

There are four intact and one partial rivet holes in the silver gilt border. One intact hole is partially torn. One rivet hole contains silvery material that might be the remains of a rivet. The other holes appear to be empty apart from soil.

Front: ~50% covered with compact, sandy soil with a small amount of plant matter. Two scratches look like they might be recent; the remainder look old. Some niello is jutting out of the channels as a result of

distortion. Some niello is missing. The remaining niello is in good to fair condition apart from a fractured section near one of the new-looking scratches. One section of the object (at the right end when viewed from the front) is bent and cracked. It is extremely vulnerable and will require consolidation and/or a support backing to prevent breakage during handling.

Back: Ungilded with heavy, dark tarnish. ~50% covered with a layer of soil ranging from thin to very thick (~0.5cm). There are at least two glossy, black inclusions in the soil (composition unknown) and one patch of fluffy, white mould. At least three vulnerable cracks are visible. These may need to be consolidated or backed to prevent further damage.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Stabilisation / Analysis / Study

Aim: Partial cleaning

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

The goals of this treatment are to 1) reveal break edges as this will help with grouping, 2) light cleaning of front surface as this will facilitate grouping, 3) stabilisation and support of vulnerable piece of silver on right end of object.

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.

An area of metal required consolidation; Paraloid B72 (ethyl methacrylate copolymer) 10% w/v in acetone was applied to the open crack. Following this, a backing of Japanese tissue was applied with Paraloid B72 20% w/v in acetone to the vulnerable section on the right side. This support will not be visible if the object is displayed and will significantly lessen the probability of this section breaking off during handling or transportation.

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 new storage box padded with white polyethylene foam was constructed to house the object.

JULY 2013: Removed soil from back using IMS, thorn and cotton wool swabs.

Post-Conservation Condition/Findings:

Cleaning revealed greater surface detail and break edges, both of which will facilitate grouping. The niello channels are both straight lines and zigzags.

The vulnerable section on the right side (as viewed from the front) was consolidated and supported with a Japanese tissue backing; it is now more stable and in less danger of breakage during handling.

A sample of niello was taken at the request of S. LaNiece (British Museum). See 'K1069 Treatment Details' for information about the location of the sampled and consolidated areas.

On the back of the object there appear to be fine scratches in a crosshatch pattern. These might be filing/finishing marks from manufacture.

Key Features:

- Niello inlay in geometric pattern
- Silver gilt border
- Empty rivet holes (one with silvery material inside)

Analysis Undertaken:

XRF analysis of the object was performed. See document 'K1069 XRF Report'.

Samples:

1. soil – front
2. niello fragment
3. white material (mould?) in soil – back
4. soil – back
5. possible niello