

K1021 Condition Report

Conservation Started: 08/10/2012

Conservation Finished: 09/10/2012

Conservator: Cymbeline Storey

Time Taken: 4.5 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 10mm (W) 9mm (T) ~1.5mm

Weight before: 0.67g

Weight after: 0.63g

Catalogue number: 568

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: None noted.

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

Small, very slightly convex fragment of silver plate with niello inlay in a linear design (V-shaped pattern). All edges are breaks, and the fragment has one partial fastening hole.

Associated Objects: K310 and others (TBC)

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

The fragment is very slightly convex. All edges are breaks. On one edge is the remnant of one partial fastening hole. The break along the edge with the fastening hole might be recent; shiny, granular silver with no soil coverage is visible. All other breaks are covered with soil.

The front is ~50% covered with compact, sandy soil with no remarkable features or inclusions. All silver surfaces are heavily tarnished to a dark grey colour and have minor surface abrasions. Niello along the break edges is missing apart from one small section on one edge. Most of the niello in the body of the fragment is present; one section is missing. In this empty, U-shaped channel can be seen a thin film of soil, a distinct crack or scratch that runs the length of the channel (possible keying mark?) and some light green corrosion product that appears to be stable.

The back of the object is ~80% covered with soil that is thick in places and contains a few dark inclusions. Visible metal is heavily tarnished to a consistent, dark grey colour.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Study / Analysis

Aim: Partial cleaning

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, Paraloid B72

The granular soil on the front 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.

One area of niello along a break edge required consolidation as it moved when touched and was vulnerable to detachment; Paraloid B72 (ethyl methacrylate copolymer) 20% w/v in acetone was applied with a small paint brush. See 'K1021 Treatment Details' for location of consolidated areas.

Corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date.

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.

Post-Conservation Condition/Findings:

Examination of the break edges reveals that the niello channels vary in depth and taper slightly toward the bottom. The niello is slightly raised in the channel so that there is a gap between the bottom of the channel and the niello.

Along one break edge there is a patch of black material, possibly niello residue. It was left in situ.

Areas of overlap of niello inlay can be seen, suggesting that the niello was applied as strips while soft. This same feature is seen on other niello-inlaid objects in the hoard, including lentoid K310.

The silver has some consistent, old-looking abrasions that may be filing/working marks. On the front, a patch of tarnish has flaked off, revealing a shiny silver surface underneath.

Along one break edge there is a distinct horizontal scratch that may be a working mark or some deliberate mark made to help hold niello in the channel; see photographs. There is a patch of green corrosion product in the empty channel as well as a thin film of soil.

There is a small amount of waxy, purple corrosion (silver chloride) on the front silver and niello surfaces. It was left in situ.

Key Features:

- Silver plate with niello inlay in linear design
- Some niello missing
- Green corrosion product in empty niello channel

Samples:

1. soil – front and edges

2. soil – back
3. niello fragment