K161 Condition Report

Conservation Started: 08/03/2013 Conservation Finished: 08/03/2013 Conservator: Cymbeline Storey

Time Taken: 2.5 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) incomplete 17mm (W) complete 14mm (D) 3mm (Th) 1mm

Weight before: 1.95g Weight after: 1.85g Catalogue number: 570

Digital photography:

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

Annotation on any of the storage bags or boxes: None

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

Slightly convex fragment of silver strip with gilded top border and linear niello inlay. The border has one intact and one partial round, empty fastening holes. The body of the strip is silver in geometric shapes with niello inlay between them. The body has one intact fastening hole through it.

Associated Objects: TBC

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

The fragment is gently convex and has three finished edges and one break edge.

There is one intact and one partial round, empty (apart from soil) fastening holes in the gilded border. There is one additional round, empty (apart from soil) fastening hole through the body of the strip that cuts through an area of niello inlay.

Most of the niello appears to be intact; there is an area where niello is missing and the channels are filled with soil (lower right corner). The niello appears to be secure and in fairly good condition. It stands slightly proud of the surface.

The front surface has general surface abrasion (including some old-looking, regular scratches that might be working/polishing marks). The silver is heavily tarnished to a grey colour and has patches of silver chloride corrosion. There is minimal soil coverage, mostly in the empty niello channels and fastening holes.

The back is slightly concave, ungilded and has numerous old-looking working/filing marks. Thick deposits of soil cover ~50% of the surface.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Study / Analysis Aim: Total 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/back 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.

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. 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:

The surface can now be better seen, and the break edge has been cleaned to facilitate finding joins with other objects. The niello inlay is in straight and stepped lines, and most of it is intact. In the empty channels a line can be seen. It is unclear if this is a deliberate scratch or a crack.

There are a series of small dents on the gilded border. Similar dents have been observed on other fragments of this strip and other strips with niello inlay.

The silver chloride corrosion was left in situ and can be removed, if desired, at a later date.

Key Features:

- Silver strip fragment with gilded border and niello inlay
- Silver chloride corrosion

Samples:

- 1. soil
- 2. niello fragments