K151 Condition Report

Conservation Started: 03/10/2012 Conservation Finished: 26/07/13

Conservator: Cymbeline Storey & Deborah Magnoler

Time Taken: 7 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 28.5mm (W) incomplete 10mm (D) 6mm

Weight before: 2.53g Weight after: 2.00g

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

Silver fragment with 90-degree angle edge; L sectioned. All edges apart from the 90-degree bent edge and the curved edge underneath the triangular indentations are breaks. At one end of the fragment there is a truncated protrusion. To one side of this protrusion is a small, recessed piece of silver, possibly the base of a panel that once existed in this area. Traces of gilding are visible in this area. There is a channel with niello inlay along the edge and the truncated protrusion. On one side of the fragment (plain, ungilded silver) are numerous tiny, triangular dents. They are regular and may be tool marks from manufacture.

Associated Objects: TBC

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

The fragment is roughly L-sectioned with a 90-degree bend. All edges are breaks apart from this 90-degree angled edge and the curved edge below the triangular marks. The breaks are covered with soil and look old.

One side of the object has numerous regular, triangular indentations that are now filled with soil. They look either deliberate or are evidence of some tool used during manufacture of the object. There is a patch pf pale green corrosion on this side and some light abrasions.

The top edge has a channel containing niello inlay. Soil covers ~60% of the exterior surface and obscures surface decoration. There is a thick deposit of soil on the back. The soil contains some black deposits. Ungilded silver areas are heavily tarnished to a dark grey colour.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Study / AnalysisAim: 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 exterior (top, sides and edges) 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. Some of the soil on the interior surface was removed so facilitate finding joins with other pieces; soil was left on the inside corner of the 90-degree bend to preserve any potential organic material that may exist there.

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 inside surface (soil-covered area) 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.

26/07/13: some of the remaining soil at the back of the object was reduced further, in order to expose the deposits at the back of the object (see post-conservation findings). There were no further findings to report. DM

Post-Conservation Condition/Findings:

Soil removal from exterior has revealed the surface decoration and enabled confirmation that niello is present. The niello is clearly raised in the channel and appears to have never been intended to be flush with the top of the channel. Its texture is bumpy/rough. About 80-90% of the niello is present. In areas of missing niello no distinguishing tool marks or keying of the channel can be seen. The niello inlay design could be described as an 'inverse zigzag' design, with a raised lip of silver in a zigzag configuration with niello inlaid on either side of it. This is the opposite of the configuration seen normally, with a zigzag of niello with silver on either side.

There are white and orange deposits (organic?) on the inside of the 90-degree bend.

Ungilded silver areas have patchy tarnish ranging in colour from light grey to black. The gilded area has patchy tarnish ranging in colour from orange to grey. There are patches of green corrosion product on the side with the triangular indentations.

The object has many surface scratches and dents, most of which look old. Some dents on the curved, finished edge below the triangular dents might be recent.

Soil has been removed from the triangular indentations, showing that they are shallow, vary slightly in dimensions and apparent depth, and seem to be spaced apart regularly. It is unknown if they are deliberate marks or tool marks from manufacture; this is something that warrants further investigation.

Break edges have been cleaned to facilitate finding joins with other fragments. All breaks look old. There are small flecks of green corrosion on some break edges.

Key Features:

- Fragment of silver gilt with 90-degree edge; boxy construction
- Area of gilded three-ridge interlace design
- Border has niello inlay in an unusual pattern inverse to that normally seen
- Possible organic material (white & orange deposits)

Samples:

- 1. soil from front and edges
- 2. soil from interior
- 3. possible niello in soil, top
- 4. black and green deposits in soil, top DISPOSED
- 5. black inclusion (possible niello?) in soil, exterior DISPOSED