K 1623 Condition Report

Conservation Started: 12/12/2012 Conservation Finished: 12/12/2012 Conservator: Cymbeline Storey Time Taken: 3 hours Including digital photography, report, conservation and packing.

Dimensions: (L) 26mm (W) 15mm (D) 9mm Weight before: 3.81g Weight after: 3.63g Catalogue number: 76

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

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

Fragment of silver gilt fitting (type of pommel cap?) consisting of one face and about half of the top of the object. The other face is missing. It has complex cast or incised decoration with traces of niello inlay and a central, recessed/concave silver gilt area featuring a swirl design. The decoration on the front face is three-ridge interlace, and on top is a geometric pattern.

Associated Objects: K1631, K1642 (fragments of same object); possibly others (TBC)

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

The decorated area is covered with a thin layer of green corrosion products and tarnish. A small amount of soil is present in recessed areas, and the central recessed/concave area is completely filled with soil that contains a few small stones. Some of the break edges look possibly fresh/recent.

A small amount of niello inlay can be seen on the top area of the decorated surface. There is a large clump of light green corrosion product on the front.

The inside of the object is tarnished and has some silver chloride corrosion. There is a raised ridge that might be the remains of a second shaft, now missing.

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, top and sides 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.

The large lump of green corrosion product was removed with a thorn and scalpel as it distracted considerably from the appearance of the object and might become active if exposed to unsuitable environmental conditions. The corrosion was retained in sample vial3. The thinner layer of green corrosion product on the surface as well as some specks of silver chloride corrosion 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 interior 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:

A few flecks of niello inlay are present; the majority of the niello is missing, presumably pushed off by the formation of bulky corrosion products during burial.

Soil removal has made the surface decoration more legible. The surface now has a green, slightly shiny appearance, except for the central recessed area, which is shiny gold in colour. The decoration on the intact side resembles a face.

This fragment joins with K1631 and K1642.

Key Features:

- Silver gilt fitting fragment
- Niello inlay
- Complex decoration

Samples:

- 1. soil front
- 2. soil back ADDED TO SAMPLE 1
- 3. green corrosion product from front

Analysis:

Surface XRF analysis was undertaken on a number of components including the gilding present on the body, ring and shoulders and the silver surrounding the niello.

A sub-surface area was prepared on the three different parts of the pommel to allow analysis of the core alloy. The first was on the base of the sword ring K1623, the second was the edge of the gilded shoulder fragment K242 and finally on the base of the main body K1385.