

K 1382 Condition Report

Conservation Started: 22/03/2011

Conservation Finished: 24/03/2011

Conservator: Cymbeline Storey

Time Taken: 8 hours

Including digital photography, report, conservation and packing.

Dimensions: Fragment 1: (L) 35 mm (W) 26 mm (D) 1 mm

Fragment 2: (L) 15 mm (W) 17 mm (D) 1 mm

Fragment 3: (L) 18 mm (W) 16 mm (D) 1 mm

Weight after: 5.28 g (attached to Correx® board)

Catalogue number: 597

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, during and after

Annotation on any of the storage bags or boxes: None

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

Three fragments of gilded silver sheet showing partial human figures and other decoration. The fragments appear to join together. They have been adhered to Correx® board using HMG cellulose nitrate adhesive and a layer of nylon gossamer as a barrier. As such, the back of the objects cannot be seen.

For descriptive purposes, the fragments have been numbered 1-3. Fragment 1 is the largest fragment, situated on the left. Fragment 2 is a smaller fragment to the top right of fragment 1. Fragment 3 is situated to the bottom right of fragment 1.

Associated objects: None identified at present

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

Iridescent tarnish covers much of the front surface of all three fragments. Compacted soil is adhered to some areas of the surface, particularly recessed areas. There are many fine, superficial scratches on the surface. The gilding layer has peeled off the surface at some of the break edges. This is particularly noticeable at the bottom edge of fragment 1. The gilding layer is worn in some spots.

There are a few flecks of waxy purple corrosion (silver chloride) on all fragments, though a larger amount is seen on fragment 2 around the shield area.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display

Aim: Partial cleaning/Stabilisation

Materials: cotton swab, cocktail stick, IMS, Silvo

The fragments were detached from their support using acetone applied with a brush. HMG cellulose nitrate residue was removed from the back of the objects with an acetone swab.

Soil was removed from the front of the objects with a swab of 50:50 IMS:water followed by a swab of IMS.

Silver chloride corrosion was removed using a blunt scalpel under 40x magnification.

Tarnish was removed using a small amount of Silvo paste (ie, the liquid in the Silvo wadding) on a cotton wool swab moistened with IMS (the Silvo wadding was not used). The goal was to remove the distracting multicolour tarnish so that the surface can be seen, but not to overclean the object as its appearance should match that of the other similar (but as yet unexamined) silver gilt sheets.

The backs of the objects were not cleaned with the exception of an area on the back of fragment 1 for XRF analysis. This area was cleaned with a swab of IMS.

Two cracks (large cracks on fragment 3 and lower half of shield on fragment 2) and an area of lifting gilding at the bottom of fragment 1 required consolidation. Paraloid B72 (ethyl methacrylate copolymer) 10% w/v in acetone was applied with a small brush.

The fragments were adhered to a piece of Correx® plastic board with a layer of nonwoven fibre textile as a barrier for easy release in the future.

A new storage box padded with white polyethylene foam was constructed.

Post-Conservation Condition/Findings:

Upon detaching the fragments the backs of the objects could be seen. The backs appear to be ungilded and are covered with black tarnish and small, flat specks of purple corrosion (silver chloride). Some soil is also adhered to the back of all fragments. This was left in situ except where cleaned for XRF analysis.

With the distracting tarnish removed, the surface of the object can now be read better. Apart from a few deeper scratches on fragment 1, there are many superficial scratches that are not distracting to the naked eye. There are several small, thin, stable cracks running from the edges of the foils. See loan out condition report for details.

One small speck of inactive green corrosion product was observed on the back of fragment 2.

XRF analysis of the front and back of fragment 1 was performed. See 'K1382 XRF report'.