

6.2 PARTHENON RECLINING GODDESSES

(DIANE AND APHRODITE)



Cast before conservation - front



Cast after conservation – front



Cast before conservation - back



Cast after conservation - back

6.2.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Reclining Goddesses (Diane and Aphrodite); copy of the sculptures from Pediment in Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.

NUMBER(S): 035, P002 (066)

TYPE OF OBJECT: Plaster cast with a metal/wooden structure inside.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF.

DIMENSIONS/WEIGHT (APPROX): H: 1300mm W: 12350mm D: 800mm

Weight (approx):

6.2.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Sound, but joint between the two sections is open and the metal fixings to the rear are partly detached.

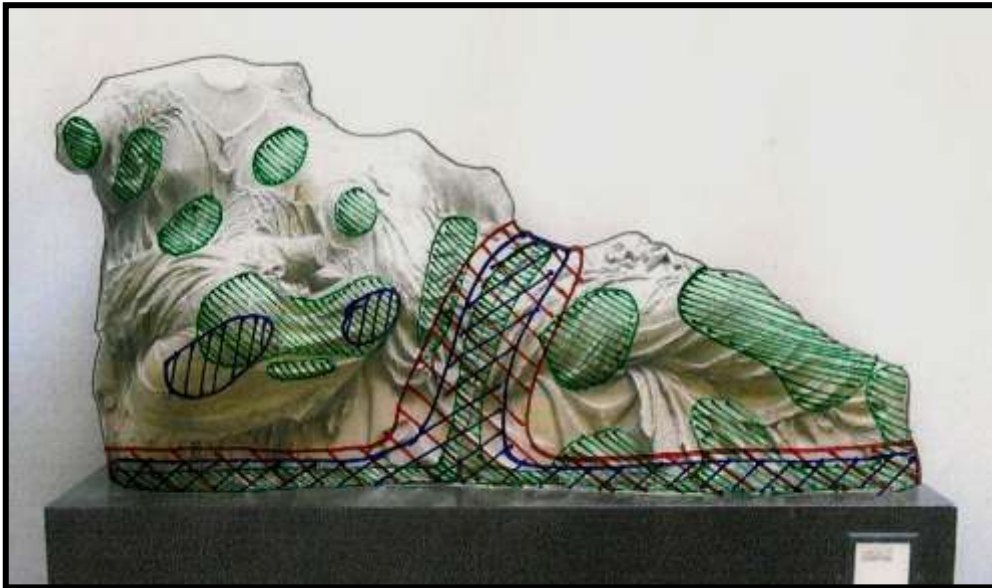
SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-umber paint on surface of the cast; uneven darker over-paint to previous repairs, some paint splashes and pencil graffiti. The surface is worn and possibly stained due to previous cleaning regime.

CHIPS AND LOSS: 5% chips overall, especially around joint and lower edge.

ABRASIONS: several abrasions (around 3%) mostly on projecting parts, for example the knee of the dexter figure.

PREVIOUS REPAIRS: From college archives we know that the casts were treated many times over the years but, unfortunately, the documentation is not very detailed. There is evidence of previous work to the area of joint between two sections and, following the cleaning of the surface, the old over-paint in this area become very visible. The metal fixings to the rear of the sculpture are possibly not original.



Chips abrasions, missing surfaces
Paint splashes
Areas of previous repairs



Old fixings and over-paint

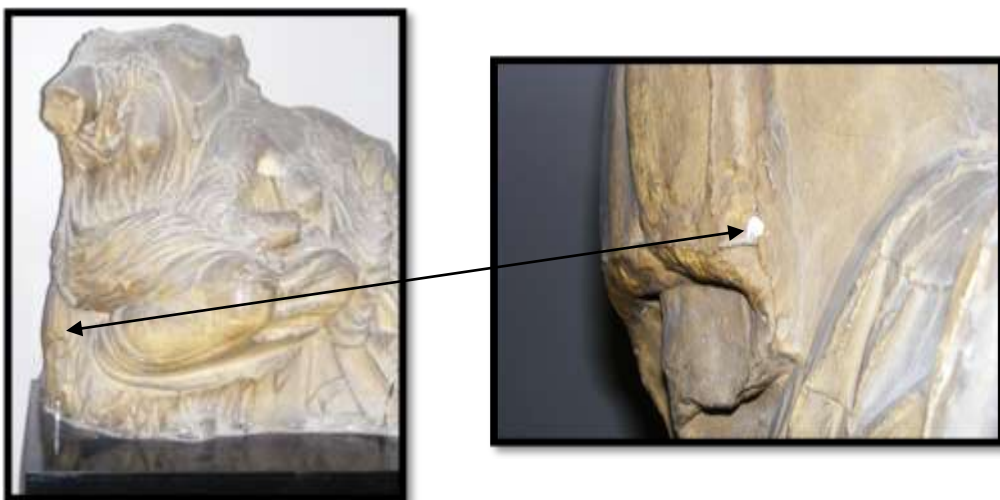


6.2.3 ORIGINAL MATERIALS AND TECHNIQUES

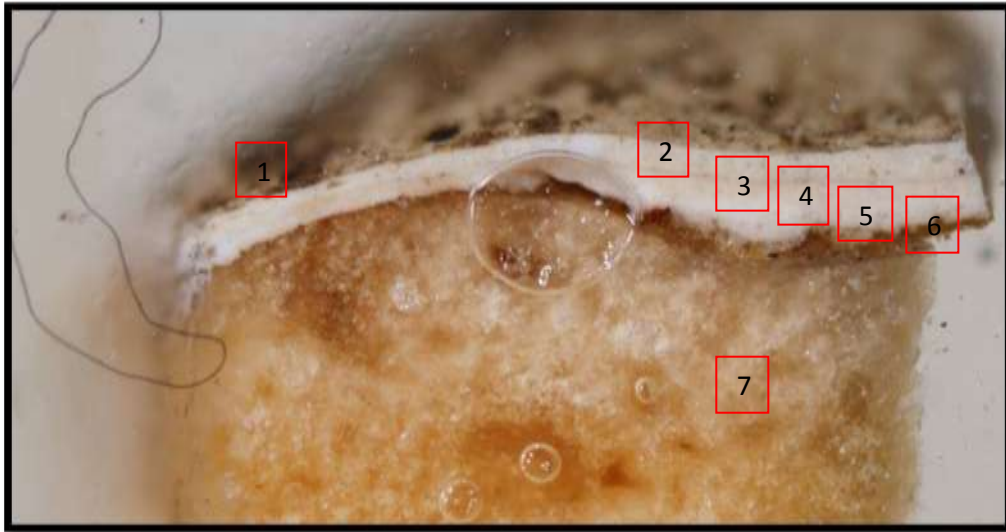
The object is a plaster cast with a metal/wooden reinforcing structure inside. The sculpture has a cream-umber polychromed surface. In order to find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with polychromy were taken from the cast and sent to the University of Northumbria for analysis.

**Investigation of coating samples from ECA Plaster Cast Collection, Edinburgh.
Consultant: Brian W Singer.**

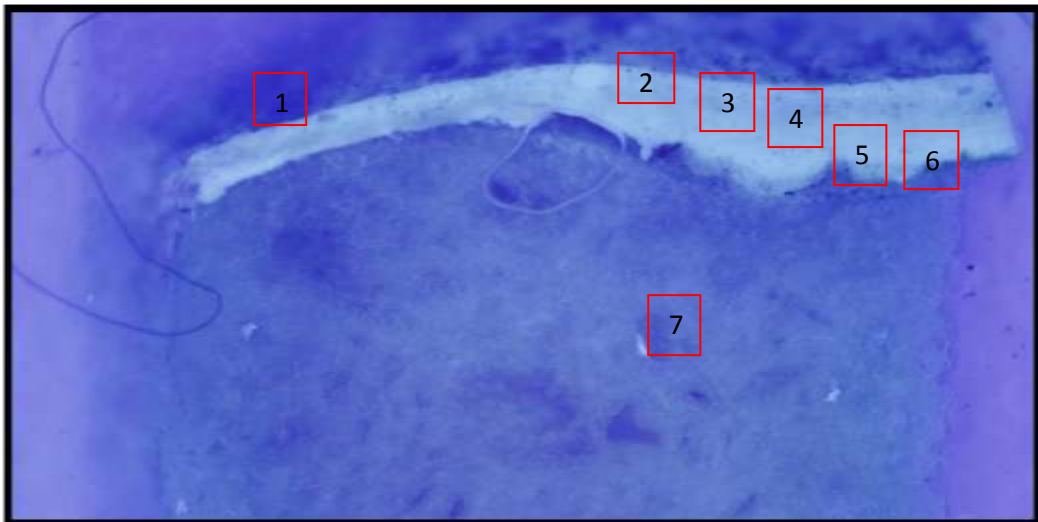
Parthenon Reclining Goddesses – Cross-section



Area of the cross-section sample



Photograph of the cross-section sample from cast of Parthenon Reclining Goddesses

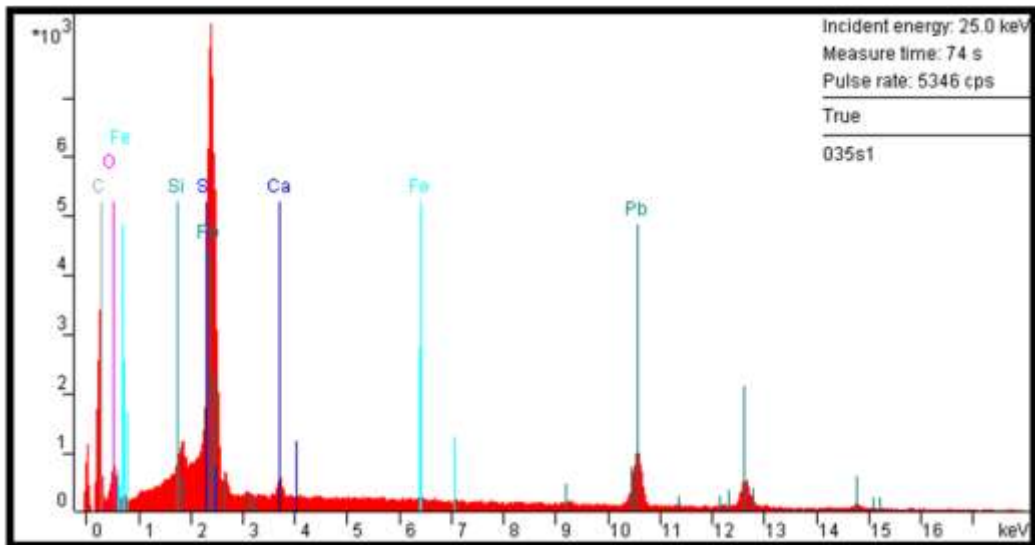


Photograph of the cross-section sample from cast of Parthenon Reclining Goddesses in UV light

Sample consists of a thick plaster layer and four paint layers. There is an incomplete grey ground followed by a bright white paint layer at the top of the plaster, then a creamier white layer followed by a thin brown layer which may be dirt or a varnish layer then another creamy white layer on top, covered in dirt and possibly blackened lead white. The greyish ground and the bright white paint layer fluoresced a blue–white colour indicating that they may contain lead white. The middle paint layer also fluoresced a blue-white colour indicating that it may contain lead white, and the uppermost layer fluoresced a blue–white colour indicating that it may contain lead white.

EDX analysis of the top layer showed mainly lead, and thus confirmed the presence of lead white, and some calcium which indicates the presence of a chalk extender. There is a trace of

iron present, which may indicate some ochre. The lower layers gave similar spectra except that the lowest layer showed a little more calcium. The plaster layer contained calcium and sulphur, again showing the plaster to be gypsum.



EDX analysis of sample from Parthenon Reclining Goddesses

6.2.4 TREATMENT REPORT

- Prior to any conservation treatment, the cast was photographed. This photographic documentation was continued throughout all conservation processes.
- Initially, the cast was dry cleaned with soft brushes and Wishab Sponges with a rubber-nozzled vacuum to pick up the loose dust and dirt.
- Following a variety of wet cleaning spot tests, the surface of the panel was cleaned with 2-5% Vulpex liquid soap in de-ionised water and V&A mix with white spirit where appropriate, using cotton wool swabs.



Cast during wet cleaning

- All areas of raw plaster were given an application of 10% Paraloid B72 in acetone to provide an isolating layer between the original plaster and the repairs.
- Areas of loss, and chips were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the joint between two parts of the cast were filled with an inert filler to provide extra strength.



Details of the fill repairs

- All the fills were toned out with acrylics, mixed with matting agent, to match the surrounding patina.



Cast during painting of the fills (sinister section toned out)

- Finally, the entire cast was given an application of micro-crystalline wax so as to protect the surface.

- The plinths for the casts were conserved by a separate contractor. In order to do so the cast had to be lifted off the old plinth and, following works to the new plinth, the cast was relocated on to it. The handling of the cast involved manoeuvring an A-frame aluminium gantry with block and tackle into position over the sculpture, and locating slings securely to the cast with Plastazote softening to protect the plaster. This ensured the sculpture was safely supported during its removal and installation onto the new plinth. In order to minimise the potential for future damage, caused by vibration during the moving of the cast around the college, a softening layer of Plastazote was placed between the new plinth and base of the cast.

6.2.5 MAINTENANCE PROGRAMME

CLEANING

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, (nitrile gloves must be worn to protect the plaster as well as the operative) removing the loose dust using soft brushes and a vacuum cleaner with a rubber nozzle that would have muslin attached to its end. The muslin prevents any potential damage to the plaster from being lost in the vacuum cleaner. Any fragments that are dislodged, and their locations on the cast, should be documented and wrapped carefully in acid free tissue prior to being stored in a safe location. A trained conservator should be contacted immediately in order to repair the damage.

NB At no time should cleaning products or any liquid (including water) be used.

HANDLING AND CARE RECOMMENDATIONS

Certain measures should be taken prior to and during the moving of these pieces:

1. It is recommended that all technicians and at least one member of the Curatorial/Archives Dept. should complete a course in sculpture handling. Any moving of sculpture should involve the attendance of at least one person who has attended such a course. The National Galleries of Scotland can supply the name of a recommended course.
2. A manual on the handling of sculpture should be made available to staff and students. ('The Care and Handling of Art Objects' by Shelley is recommended.)
3. Before handling an object it should be examined closely and any old repairs and structural weaknesses noted. Do not test or probe areas that appear weak. Never grasp projecting elements (arms, etc.) of the object as they will not support the weight.

4. Gloves should always be worn when handling or touching objects as acids and salts from perspiration can damage many materials especially plaster.
5. Report any damage to the object immediately and collect all fragments before leaving the area.
6. The object should be well protected with padding in the form of foam, Plastazote and bubble-wrap especially any fragile or projecting areas that are likely to catch on doorways etc.
7. Avoid haste and confusion while handling as this can result in injury to the handlers or damage to the object. The route to be taken, door sizes and the space for the object at the receiving end should be assessed before a move begins. Two people, at least, should be present throughout the move, one of them to open doors, steady the object where necessary and watch parts of it that the carrier cannot see.