6. FREE-STANDING CASTS

6.1 PARTHENON SEATED GODDESSES

(DEMETER AND PERSEPHONE)

Cast before conservation

Cast after conservation

6.1.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Seated Goddesses (Demeter and Persephone), copy of the sculptures from Pediment in Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): 001, P001 (030)
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: 1600mm D: 920mm
Weight (approx):

6.1.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Good.

SURFACE DUST AND DIRT: Severe, 100% coverage; dark grey stains/splashes on arms.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-white paint on surface of the cast; several black and red paint marks on chair and figures; pencil graffiti on leg of the dexter figure; black paint smears around lower edge due to previous maintenance of the plinth.

CHIPS AND LOSS: Loss of sinister lower arm to sinister figure (raw plaster at break); several chips and little losses (around 10%).

ABRASIONS: Several abrasions (around 5%).

PREVIOUS REPAIRS: From college archives we know that casts have been previously treated many times but unfortunately the documentation is not very detailed, so we don't know what treatment exactly they have received. Around 1990, almost all the free standing casts were painted with a two-part patina consisting of a cream-white paint with an over-layer of wax.

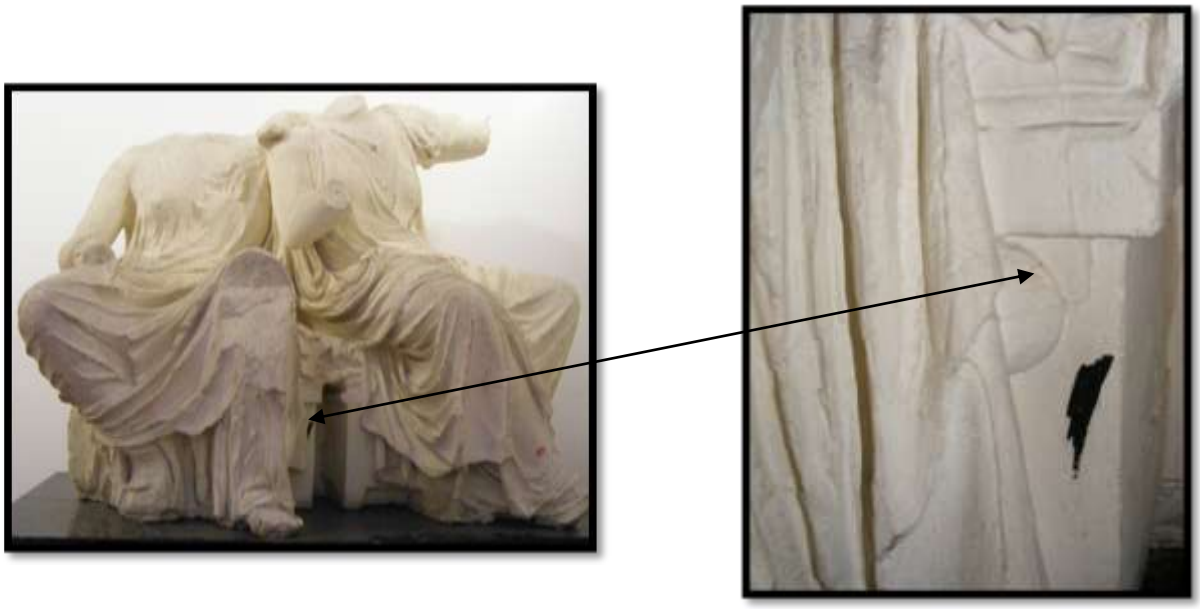
Paint splashes
Chips abrasions, missing surfaces

6.1.3 ORIGINAL MATERIALS AND TECHNIQUES

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

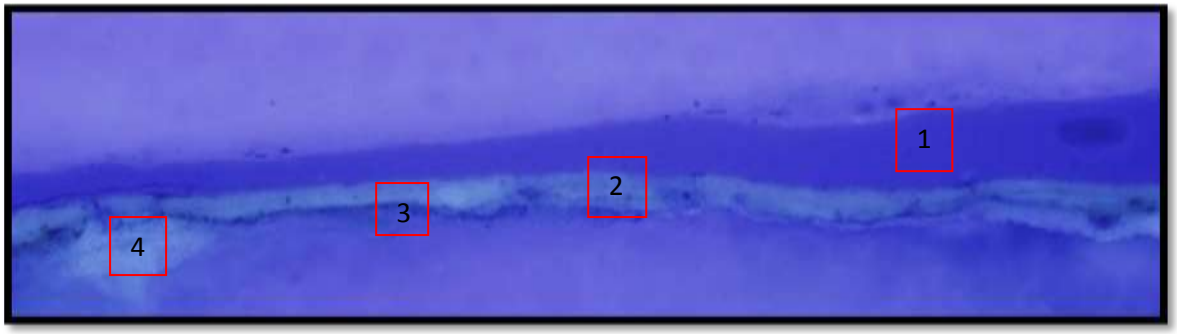
Investigation of coating samples from ECA Plaster Cast Collection, Edinburgh. Consultant: Brian W Singer.

Parthenon Seated Goddesses – Cross-section



Area of the cross-section sample

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



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

The cross-section showed a thick white layer on top of an off white layer. Below this there seems to be a discoloured varnish and then some white plaster. The uppermost white layer did not fluoresce in UV light, suggesting perhaps that the pigment is titanium white. This could be checked by EDX analysis. The layer below fluoresced blue-white suggesting that it contains lead white as the main pigment.

6.1.4 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, using cotton wool swabs.

Cast during wet cleaning

- The thick layers of black over-paint around the bottom edge were removed with scalpels.

- 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.

- To secure the broken arm of the sinister figure, a cast of the broken area was taken and a ‘cap-like’ end was created. The end was secured in place with HMG adhesive.

Details of the repair work to the arm of the sinister figure

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

- Finally, the entire cast was given an application of micro-crystalline wax so as to protect the surface. Before application wax was mixed with pigments: black and raw umber.

- 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.

6.1 .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.

STORAGE AND DISPLAY RECOMMENDATIONS

1. The display of the piece should be given emphasis. For example, displayed pieces should have associated information by way of, say, a plaque that would indicate what the piece is and its history. “Do Not Touch” signs for the pieces on permanent display are recommended.

2. No repairs should be undertaken without a trained conservator in attendance

3. Literature about the collection should be made available to staff, students and visiting groups to develop a greater appreciation of the objects.

4. A complete catalogue of all the objects in the collection, and their locations, should be undertaken and, should any piece be moved the new location should be continuously monitored and noted.

5. Safe gaps between the pieces, and their plinths, and the swing doors should be maintained at all times.

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.