

1.2 SCULPTURE COURT UPPER GALLERY NORTH WALL

PANEL 1



Panel before conservation



Panel after conservation

1.2.1.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 1.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 3 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 730mm D: 50mm

Weight (approx):

1.2.1.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; cracks around fixing on top of the panel.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on surface of the cast; small spots of paint splashes scattered on surface of the panel mainly on its dexter and bottom edges.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.1.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.1.4 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 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.1.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

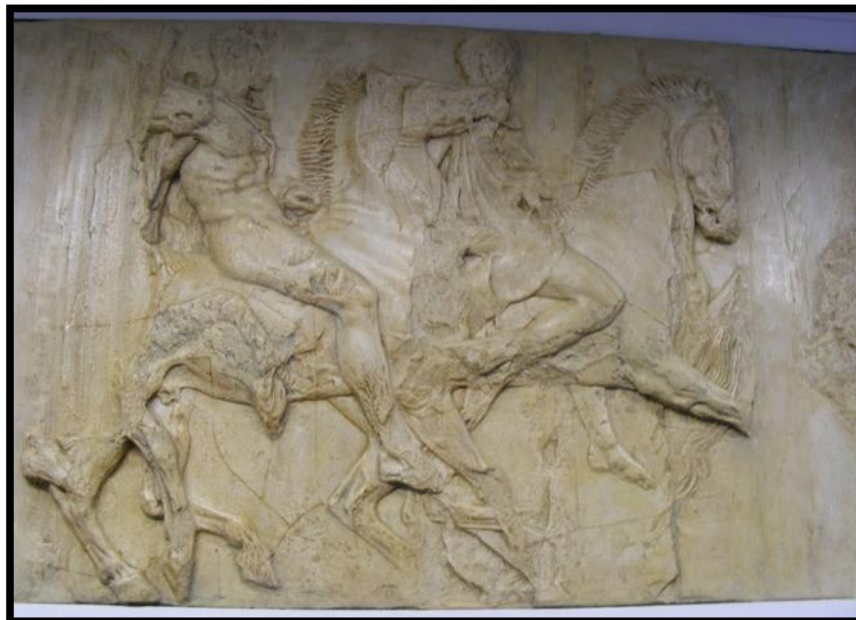
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 2



Panel before conservation



Panel after conservation

1.2.2.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 2.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 3 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery South Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1,230mm D: 50mm

Weight (approx):

1.2.2.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on the surface of the cast; small dots of paint splash scattered on surface of the panel and on the bottom edge; small areas of paint loss on the surface of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.2.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.2.4 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 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.2.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 3



Panel before conservation



Panel after conservation

1.2.3.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 3.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 3 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1150mm D: 50mm

Weight (approx):

1.2.3.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel small cracks around fixings in corners of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: layer of cream-yellow paint/varnish on the surface of the cast; small spots of paint splash scattered on the panel, the majority of which are at the top dexter corner and at the lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks, especially alongside crack at the sinister side of the panel.

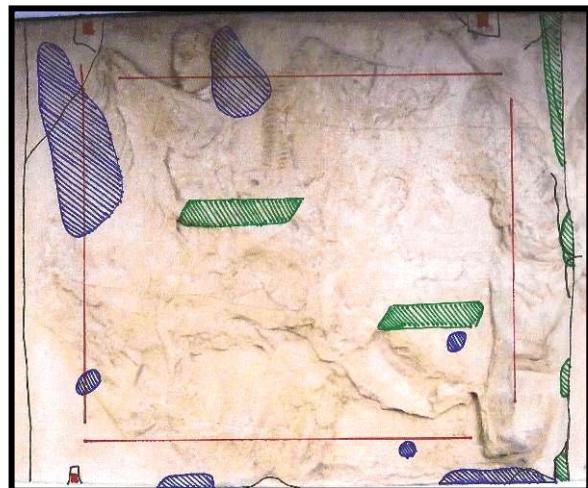
ABRASIONS: Missing surface plaster and paint layer in two areas in middle of the panel.

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



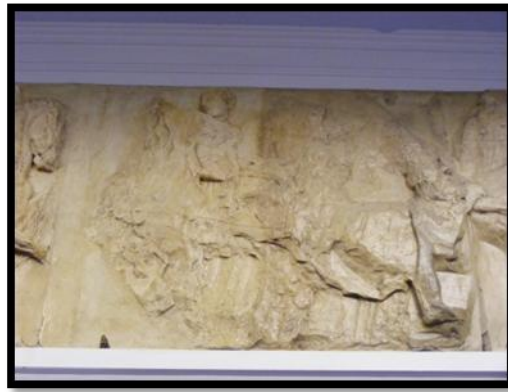
Samples of mortar were taken for analysis

1.2.3.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.3.4 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 loose dust and dirt.
- Following wet cleaning spot tests the surface of the panel was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.3.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

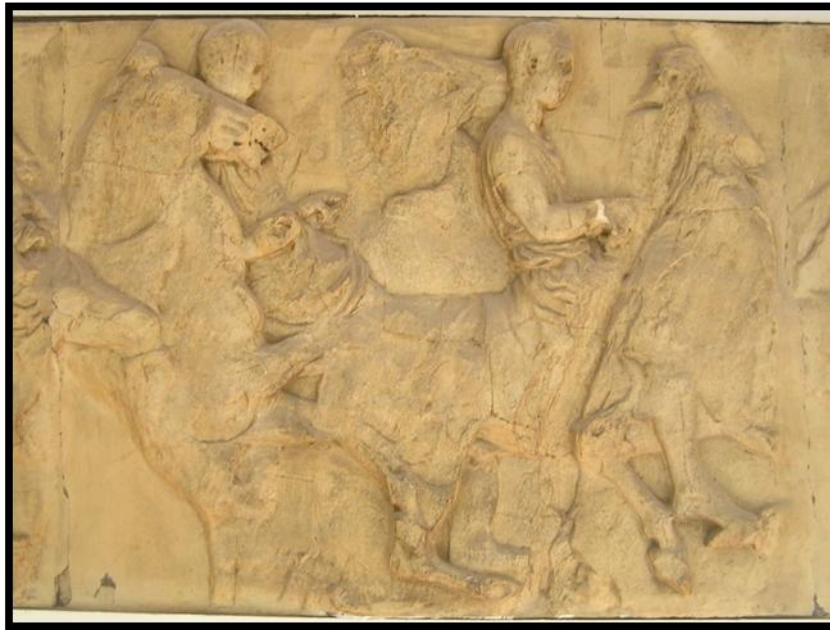
Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

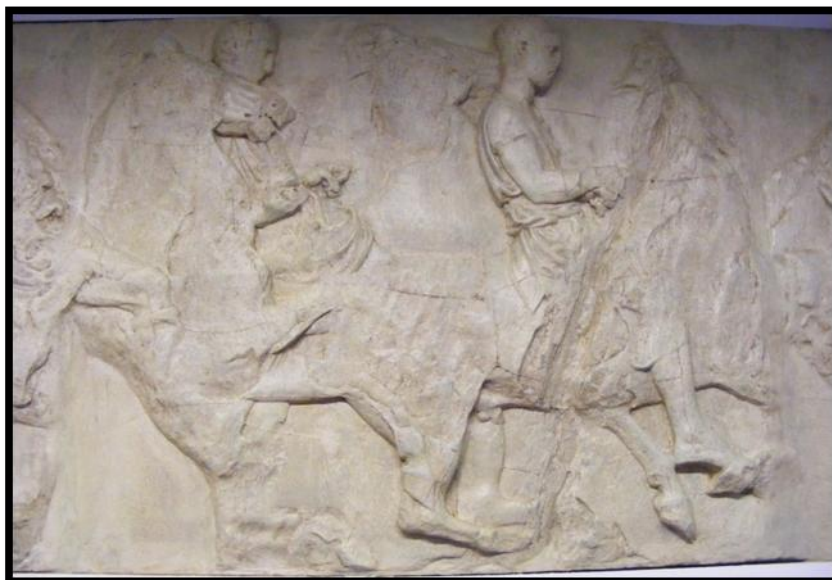
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 4



Panel before conservation



Panel after conservation

1.2.4.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 4.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1240mm D: 50mm

Weight (approx):

1.2.4.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings in two corners of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on the surface of the cast; small spots of paint splash scattered on the panel, the majority of which are at lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks; large missing area on the hand of a rider on sinister side.

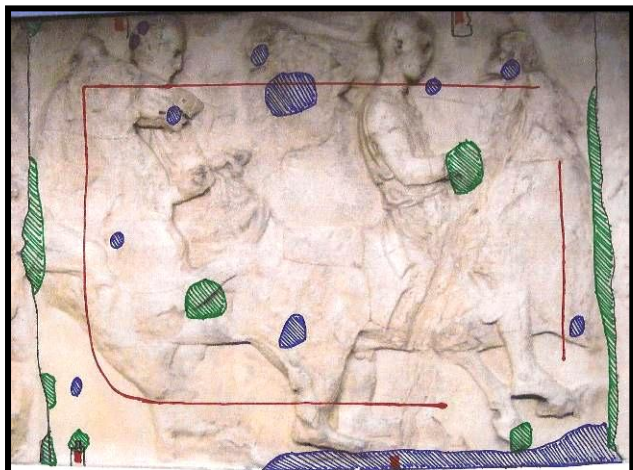
ABRASIONS: Missing surface plaster and paint layer in two areas in middle of the panel.

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.4.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.4.4 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 loose dust and dirt.
- Following wet cleaning spot tests, the surface of the panel was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.4.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 5



Panel before conservation



Panel after conservation

1.2.5.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 5

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings

MAKER: Unknown

SIGNATURE/INSCRIPTION: Number '50' in top, dexter corner.

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh EH3 9DF, Main Building, Sculpture Court, Upper Gallery North Wall

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1,810mm D: 50mm

Weight (approx):

1.2.5.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings in three corners of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on the surface of the cast; small spots of paint splash scattered on the panel, the majority of which are at the lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks.

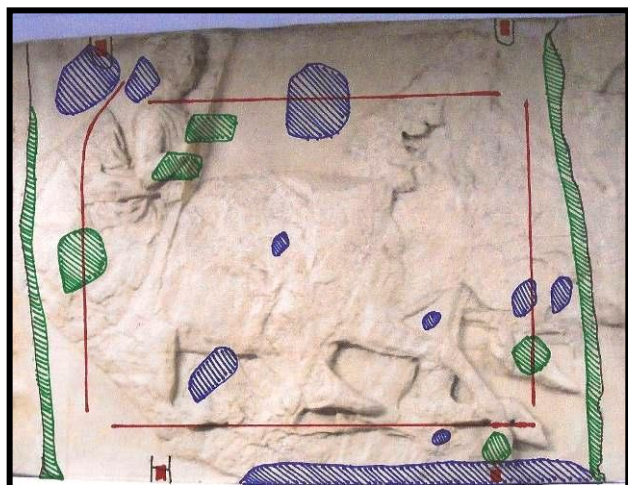
ABRASIONS: Not significant.

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.5.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.5.4 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 loose dust and dirt.
- Following wet cleaning spot tests, the surface of the panel was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.5.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

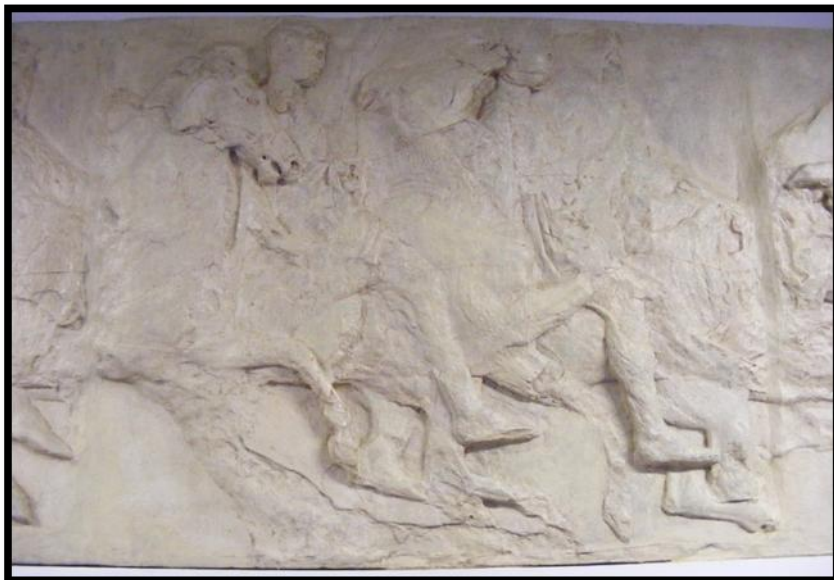
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 6



Panel before conservation



Panel after conservation

1.2.6.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 6.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: Number '41' in top, dexter corner.

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1220mm D: 50mm

Weight (approx):

1.2.6.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel and at top dexter corner; small cracks around fixings in three corners of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on surface of the cast; small spots of paint splash scattered on the panel, the majority of which are at the lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant.

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



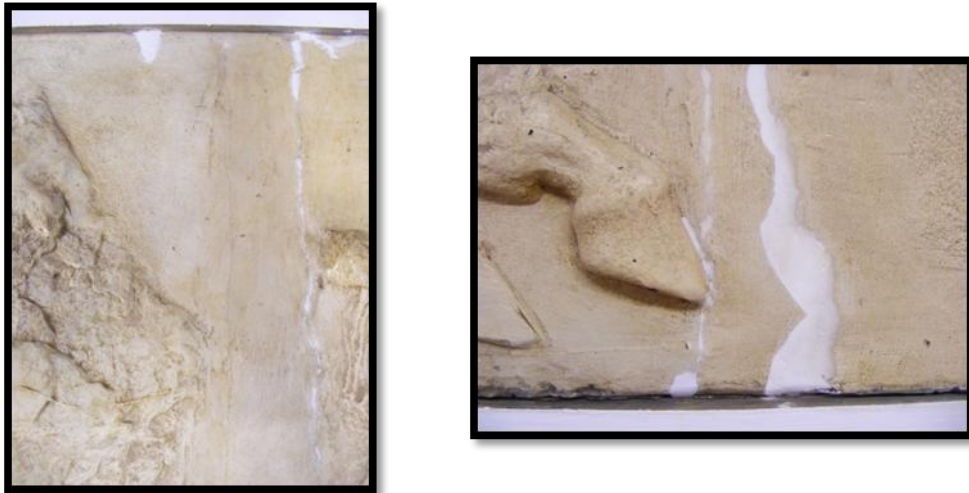
Samples of mortar were taken for analysis

1.2.6.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.6.4 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 loose dust and dirt.
- Following wet cleaning spot tests, the surface of the panel was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.
- 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.



Details of fill repairs

- All the fills were then 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.

1.2.6.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 7



Panel before conservation



Panel after conservation

1.2.7.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 7.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 3 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1230mm D: 50mm

Weight (approx):

1.2.7.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; large crack running from dexter side of panel towards centre of the cast in its upper part.

SURFACE DUST AND DIRT: Severe, 100% coverage

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash mainly on sinister side of panel.

CHIPS AND LOSS: Missing areas associated with the cracks and around screws on both sides of the panel at its lower edge.

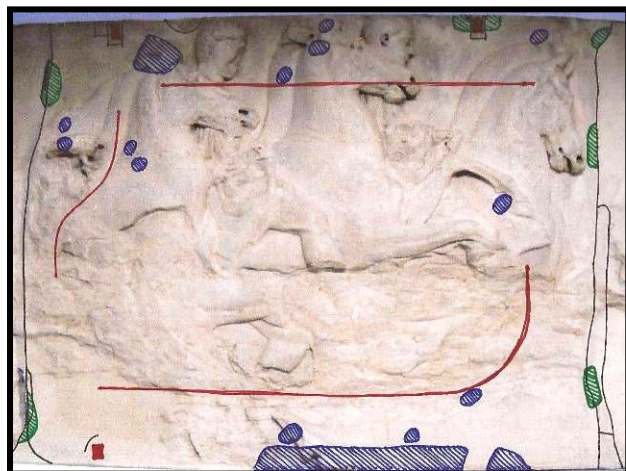
ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



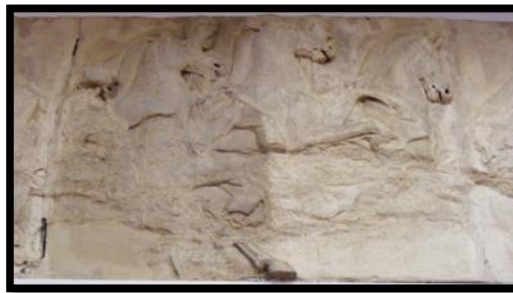
Samples of mortar were taken for analysis

1.2.7.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.7.4 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.



Details of fill repairs

- All the fills were then 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.

1.2.7.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

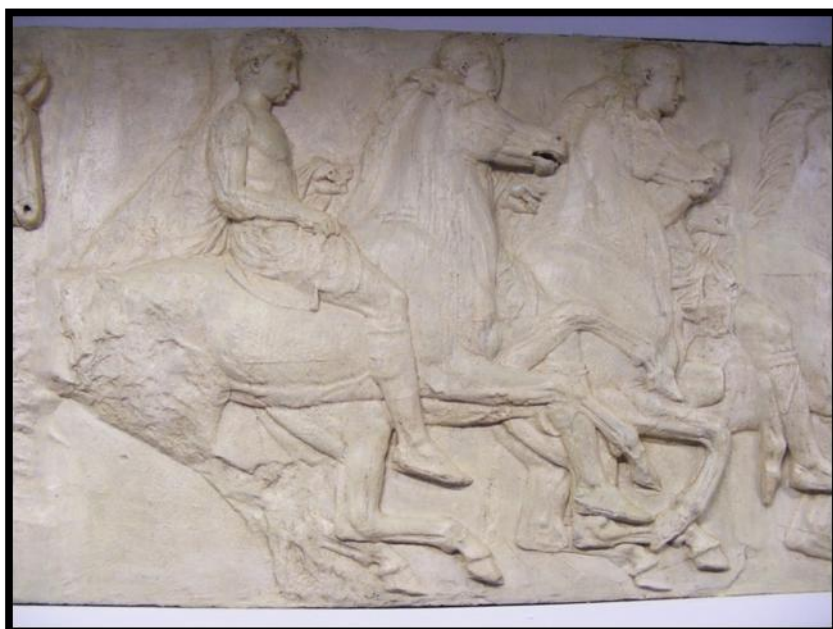
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 8



Panel before conservation



Panel after conservation

1.2.8.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 8.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1120mm D: 50mm

Weight (approx):

1.2.8.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings in three corners of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash mainly at lower edge.

CHIPS AND LOSSES: Missing areas associated with the cracks.

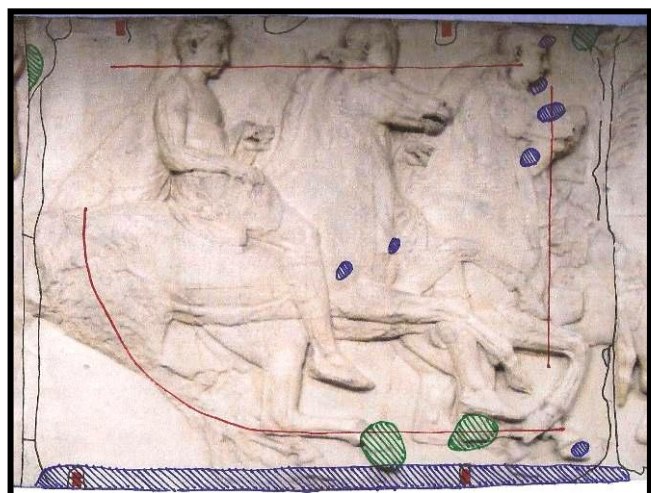
ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.8.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.8.4 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.



Details of fill repairs

- All the fills were then 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.

1.2.8.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 9



Panel before conservation



Panel after conservation

1.2.9.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 9.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 3 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1180mm D: 50mm

Weight (approx):

1.2.9.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around three fixings.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel, and at lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.9.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.9.4 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.



Details of fill repairs

- All the fills were then 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.

1.2.9.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 10



Panel before conservation



Panel after conservation

1.2.10.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 10.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1220mm D: 50mm

Weight (approx):

1.2.10.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings on top part of the panel.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel, and at lower edge, drip marks in middle section of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks, mainly on dexter side.

ABRASIONS: Not significant

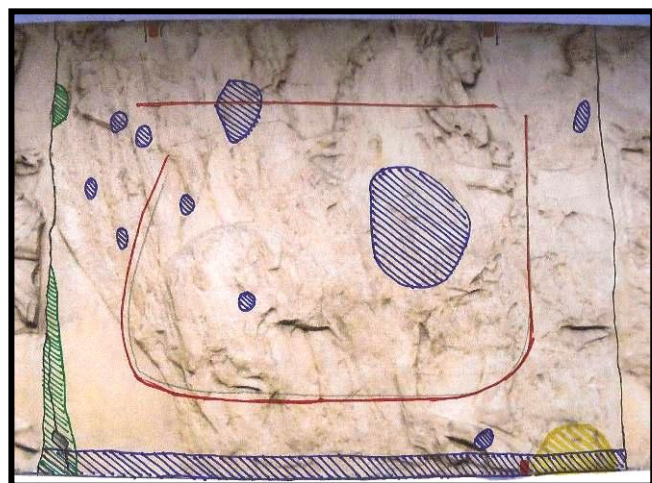
Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes

Flaking paint



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.10.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.10.4 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, using cotton wool swabs.



Cast during wet cleaning

- Areas of flaking paint were consolidated with 5% Primal B60A in de-ionised water.
- 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.10.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

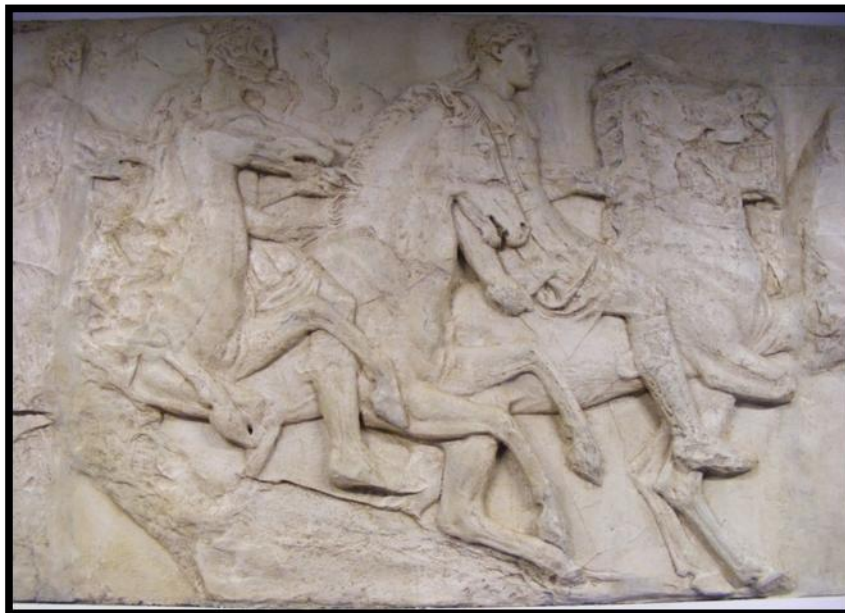
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 11



Panel before conservation



Panel after conservation

1.2.11.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 11.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 3 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1210mm D: 50mm

Weight (approx):

1.2.11.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings on top part of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast, in some parts very shiny due possibly to a yellowed varnish; small spots of paint splash scattered on surface of the panel, and on bottom edge.

CHIPS AND LOSS: Missing areas associated with the cracks, mainly on sinister side of the panel.

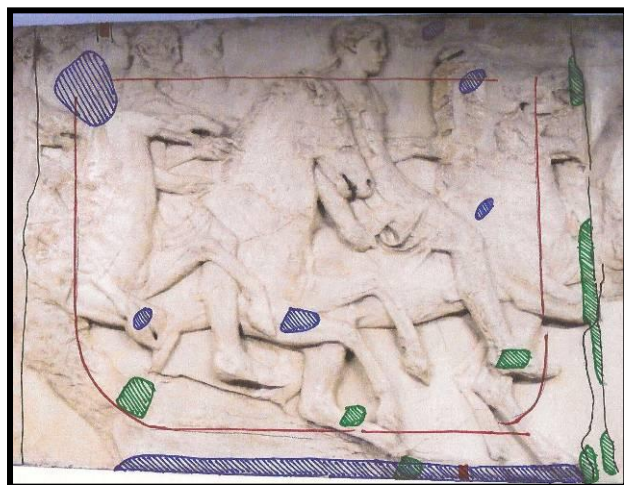
ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.11.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South Wall**, shows several different colour layers.

1.2.11.4 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.11.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

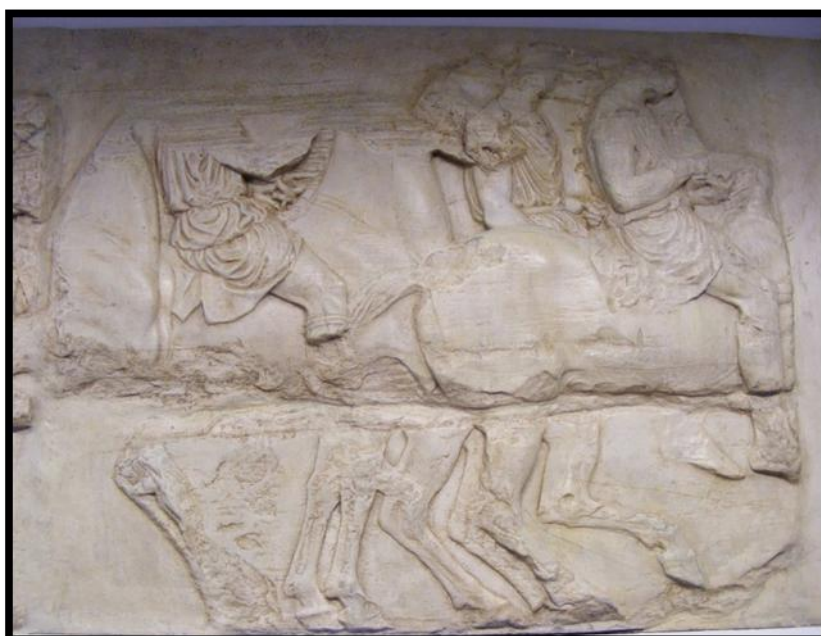
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 12



Panel before conservation



Panel after conservation

1.2.12.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 12.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1220mm D: 50mm

Weight (approx):

1.2.12.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel, and through the cast on its lower part; small cracks around the fixings.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel, especially on top sinister part and at lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks, mainly on dexter side of the panel.

ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.12.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.12.4 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.12.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

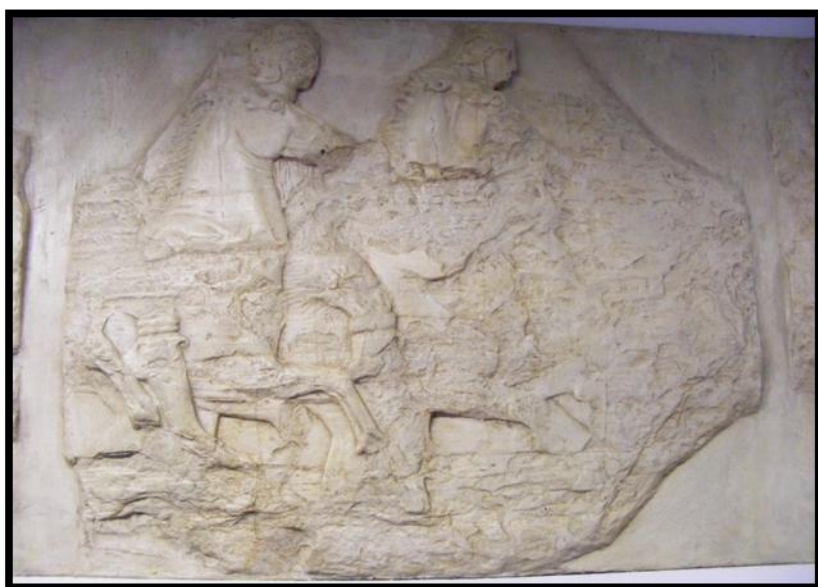
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 13



Panel before conservation



Panel after conservation

1.2.13.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 13.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1220mm D: 50mm

Weight (approx):

1.2.13.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel, and through the cast on its lower part; small cracks around the fixings.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel, and at edge.

CHIPS AND LOSS: Missing areas associated with the cracks.

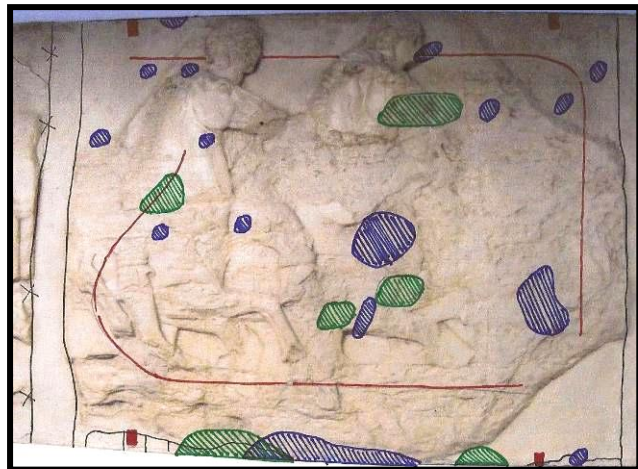
ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.13.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.13.4 **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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.13.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

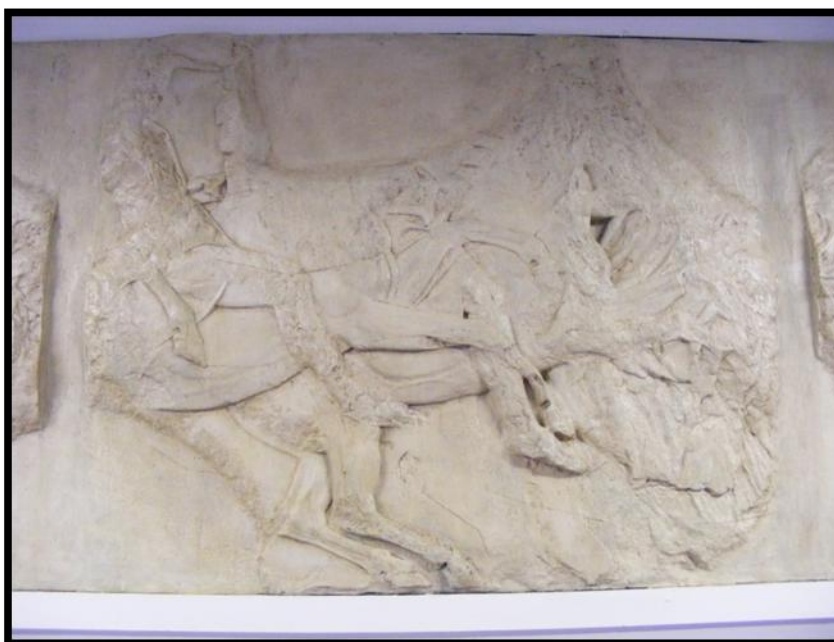
NB At no time should cleaning products or any liquid (including water) be used.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 14



Panel before conservation



Panel after conservation

1.2.14.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 14.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 5 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1220mm D: 50mm

Weight (approx):

1.2.14.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around the fixings in lower part of the cast.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; very shiny layer of, possibly, varnish at dexter part of the panel; small spots of paint splash scattered on surface of the panel, and on bottom edge.

CHIPS AND LOSS: Missing areas associated with the cracks by bottom edge of the panel.

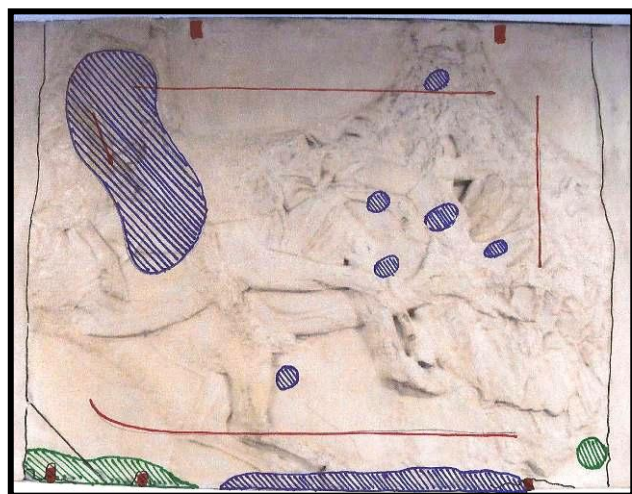
ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.14.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.14.4 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, 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.14.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 15



Panel before conservation



Panel after conservation

1.2.15.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 15.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1220mm D: 50mm

Weight (approx):

1.2.15.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around the fixings.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel, and at lower edge.

CHIPS AND LOSS: Missing areas associated with the cracks at lower edge of the panel.

ABRASIONS: Not significant

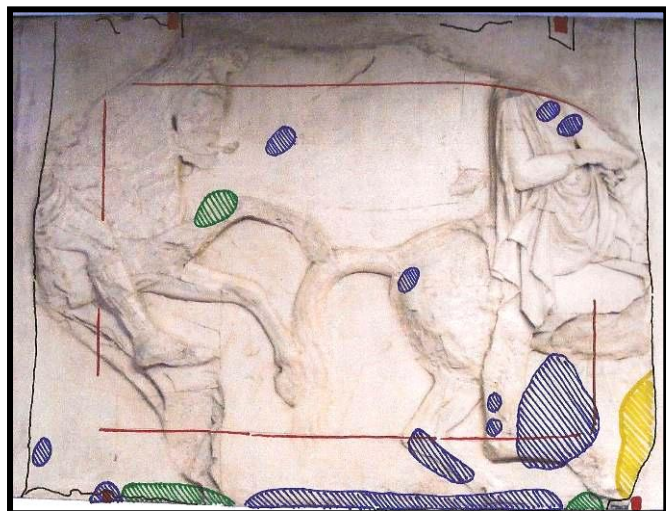
Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes

Flaking paint



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.15.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.15.4 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, using cotton wool swabs.



Cast during wet cleaning

- Areas of flaking paint were consolidated with 5% Primal B60A in de-ionised water.
- 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.15.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 16



Panel before conservation



Panel after conservation

1.2.16.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 16.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 4 metal fixings.

MAKER: unknown

SIGNATURE/INSCRIPTION: none

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF, Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1050mm D: 50mm

Weight (approx):

1.2.16.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around the fixings in lower part of the panel.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks mainly by the bottom edge of the panel.

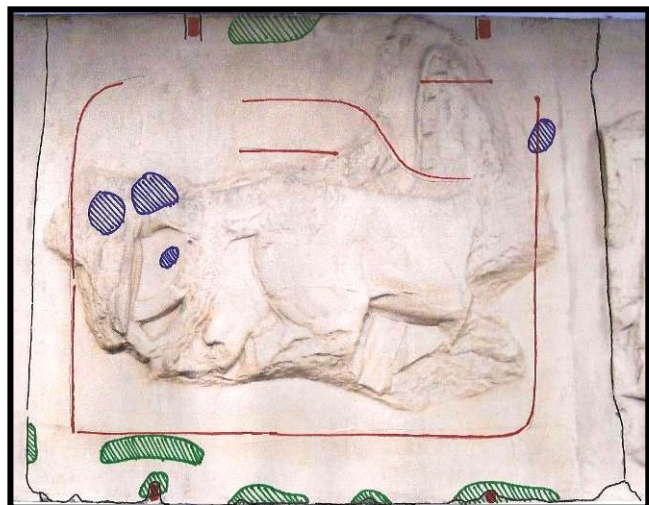
ABRASIONS: Not significant

Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.16.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.16.4 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, using cotton wool swabs.
- 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.
- All the fills were then 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.

1.2.16.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.

PANEL 17



Panel before conservation



Panel after conservation

1.2.17.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of panel from the Frieze at temple of Athena in Acropolis, Athens, Greece (443 – 438 BC).

NUMBER(S): Sculpture Court, Upper Gallery North Wall, Panel 17.

TYPE OF OBJECT: Relief, plaster cast with a metal structure inside, attached to the wall with 2 metal fixings.

MAKER: Unknown

SIGNATURE/INSCRIPTION: None

DATE: 1837

OWNER/LOCATION: Edinburgh College of Art, Lauriston Place, Edinburgh, EH3 9DF. Main Building, Sculpture Court, Upper Gallery North Wall.

DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1200mm D: 50mm

Weight (approx):

1.2.17.2 CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around the fixings in upper part of the panel.

SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint on surface of the cast; small spots of paint splash scattered on surface of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks mainly at the lower edge of the panel; flaking paint in lower, dexter part of the panel.

ABRASIONS: Not significant

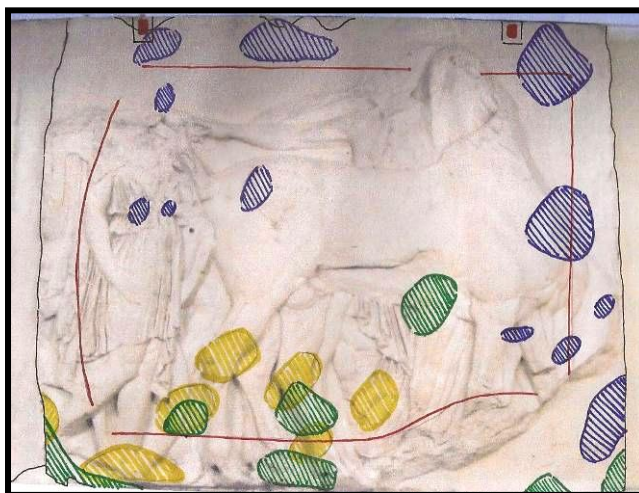
Cracks

Ferrous items under plaster

Chips, abrasions, missing surfaces

Paint splashes

Flaking paint



PREVIOUS REPAIRS:

At the time of re-siting the cast collection from the Royal Scottish Academy building on Princes Street to the Edinburgh College of Art in 1913, the Parthenon Frieze panels were installed with metal fixings set into the wall. The open joints between the panels were filled with a mortar that was smeared over the adjacent edges of the panels.

A mortar analysis was carried out by Mr Bill Revie of CMC on samples of the pointing material found between the Panel 10 and 11 on Ground Floor Galley North Wall. The mortar was found to be a thick layer of lime putty, gypsum plaster and fine sand and hair, followed by a thin layer of gypsum plaster and lime putty; and finally a layer of varnish. This final layer of varnish is found over the entire two floors of the North and South Walls and yet, interestingly, for some unknown reason, it was not applied to the slabs on the East Wall.



Samples of mortar were taken for analysis

1.2.17.3 ORIGINAL MATERIALS AND TECHNIQUES

The object is a plaster cast with a metal reinforcing structure inside. The surface of the sculpture is cream-yellow. To find out the stratigraphy, and to identify the materials of the polychromed layer, samples of the plaster with paint were taken and sent to the University of Northumbria for analysis. Photograph of a cross-section of sample taken from **Panel 1 on Upper Gallery South wall**, shows several different colour layers.

1.2.17.4 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, using cotton wool swabs.



Panel during wet cleaning

- Areas of flaking paint were consolidated with 5% Primal B60A in de-ionised water.
- 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.
- Exposed metal fixings were treated with 5% Tannic Acid so as to stabilise the corrosion, and covered with a protective layer of 20% Paraloid B72 in acetone.
- Areas of loss, open joints and cracks were filled with white micro-balloons mixed with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.



Panel during work on fills

- All the fills were then 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.

1.2.17.5 MAINTENANCE PROGRAMME

Maintenance of the Parthenon Frieze requires to be undertaken from a scaffold. As a result, any cleaning needs to be carried out by operatives that are trained to: a) construct, move and dismantle a portable scaffold tower; and b) clean the Frieze in an appropriate manner.

Graciela Ainsworth Sculpture Conservation could train staff to undertake such cleaning. The training for the use of scaffold would require organising by the Edinburgh College of Art.

The cleaning programme would involve the trained operatives, wearing the appropriate PPE, 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 Frieze, 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.

We would recommend that this cleaning programme for the Parthenon Frieze should be undertaken on an annual basis (at minimum). Ease of access would mean that the free standing casts could be cleaned, with the same method, on a more regular basis.