1. PARTHENON FRIEZE

1. SCULPTURE COURT UPPER GALLERY SOUTH WALL

PANEL 1

Panel before conservation

Panel after conservation

1.1.1.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 1
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1180mm D: 50mm
Weight (approx):

1.1.1.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

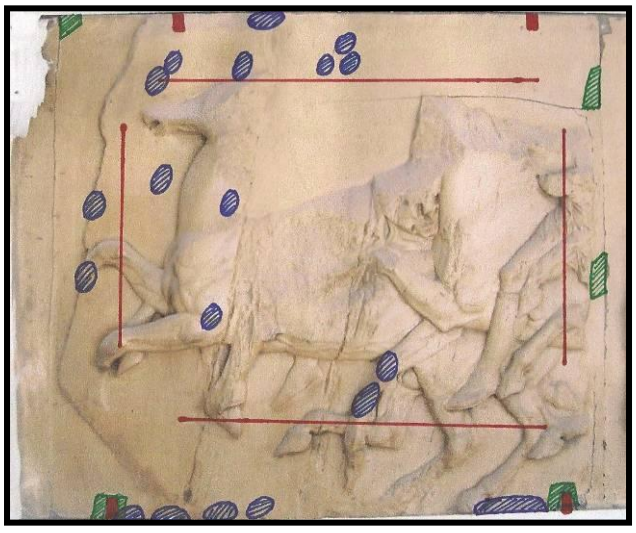
STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; large crack running from dexter side of panel towards centre of the cast in its upper part.
SURFACE DUST AND DIRT: Severe, 100% coverage.

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 bottom 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

1.1.1.3 ORIGINAL MATERIALS AND TECHNIQUES

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

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

Parthenon Frieze, Upper Gallery South Wall, Panel 1 – Cross section

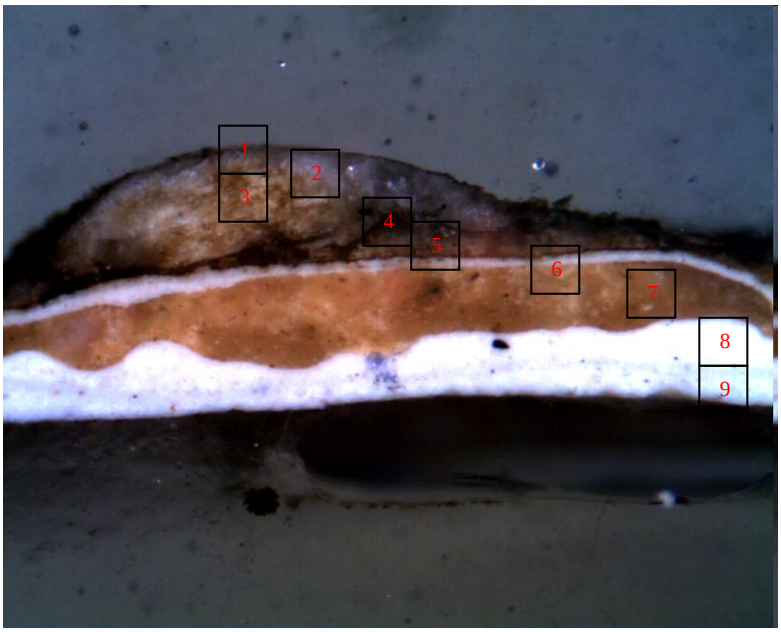


Figure 1 Photograph of a Cross-section of Sample 1

A cross-section (Figure 1) of the paint revealed, from the top layer downwards, the presence of several layers; a top thin dark grey/black layer which may be just dirt and blackened lead white; a white layer; a pale orange-grey layer containing white; black and orange-red pigments. There then appears to be a gap or more dirt and a further incomplete thin orange layer. Below this is a thin white layer, a further thick brown/orange layer and two bright white layers.
Observation under UV light showed that the pale orange-grey layer showed some yellowish fluorescence, which may indicate that it contains zinc white, though there are other materials which fluoresce yellow.

1.1.1.4 TREATMENT REPORT

- Prior to any conservation treatment, the cast was photographed. This photographic documentation was continued throughout all conservation processes.

- Initially, the cast was dry cleaned with soft brushes and Wishab Sponges with a rubber-nozzled vacuum to pick up the loose dust and dirt.

- Following a variety of wet cleaning spot tests, the surface of the panel was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Wet Cleaning Spot Tests

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.

1.1.1.5 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

1.1.2.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 2
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 South Wall
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1310mm D: 50mm
Weight (approx):

1.1.2.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

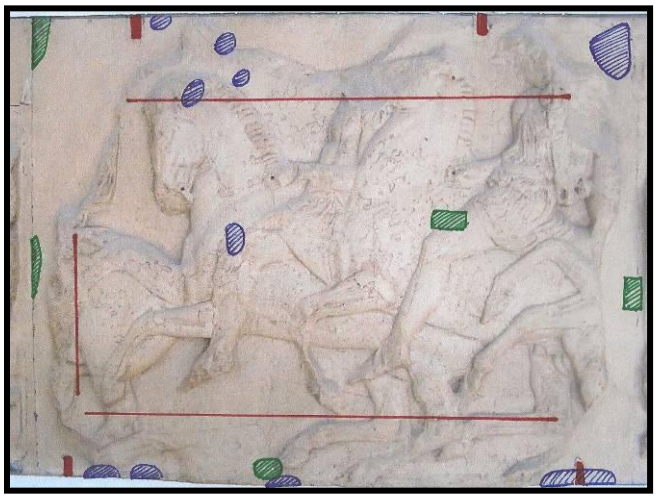
SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on the surface of the cast; small spots of paint splash on top section of the panel and alongside the bottom edge.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.2.3 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 the sample taken from **Panel 1** shows several different colour layers.

1.1.2.4 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 wet cleaning spot tests on **Panel 1,** the surface of the cast was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Panel 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 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.

1.1.2.5 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

1.1.3.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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: Number '38' in top sinister corner.
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: 1230mm D: 50mm
Weight (approx):

1.1.3.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

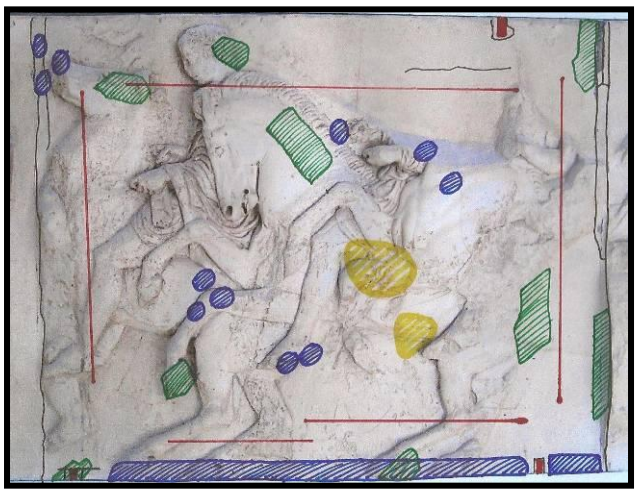
SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on surface of the cast. Small spots of paint splash scattered on surface of the panel and alongside bottom edge; area of flaking paint in the middle of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks**,** the majority of which are alongside the crack on the sinister side of the panel; missing area around metal fixing in dexter bottom corner of the cast.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.3.3 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 the sample taken from **Panel 1** shows several different colour layers.

1.1.3.4 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 on **Panel 1,** the surface of the cast 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 with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with 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.

1.1.3.5 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

1.1.4.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1230mm D: 50mm
Weight (approx):

1.1.4.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

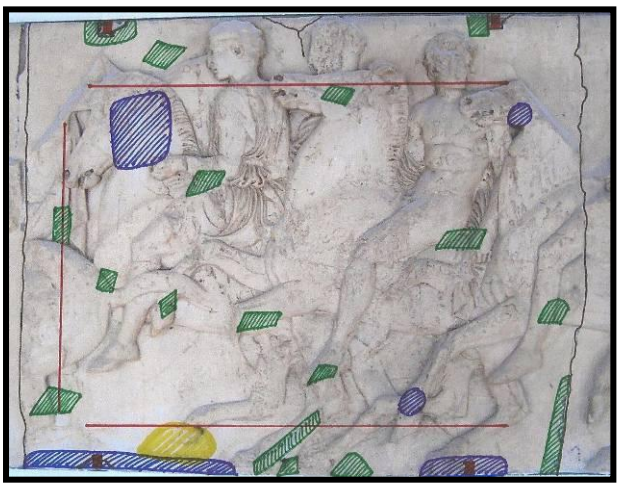
SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on surface of the cast; small spots of paint splash scattered on surface of the panel and alongside the bottom edge; area of flaking paint in the middle of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks**,** the majority of which alongside crack on sinister side of the panel; missing area around metal fixing in dexter bottom corner of the cast.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.4.3 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 the sample taken from **Panel 1** shows several different colour layers.

1.1.4.4 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 on **Panel 1,** the surface of the cast 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 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 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, 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.

1.1.4.5 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

1.1.5.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 '26' in top dexter corner.
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: 1280mm D: 50mm
Weight (approx):

1.1.5.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

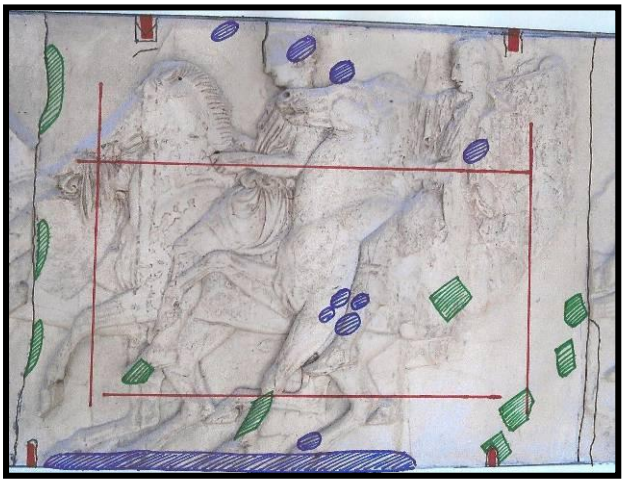
SURFACE DUST AND DIRT: Severe, 100% coverage

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

CHIPS AND LOSS: Missing areas associated with the cracks**,** the majority of which are alongside crack on dexter side of the panel; missing area around metal fixing and alongside the crack on lower sinister side of the cast

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.5.3 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** shows several different colour layers.

1.1.5.4 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 on **Panel 1,** the surface of the cast was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Panel 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, 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.

1.1.5.5 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

1.1.6.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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: 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: 1260mm D: 50mm
Weight (approx):

1.1.6.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

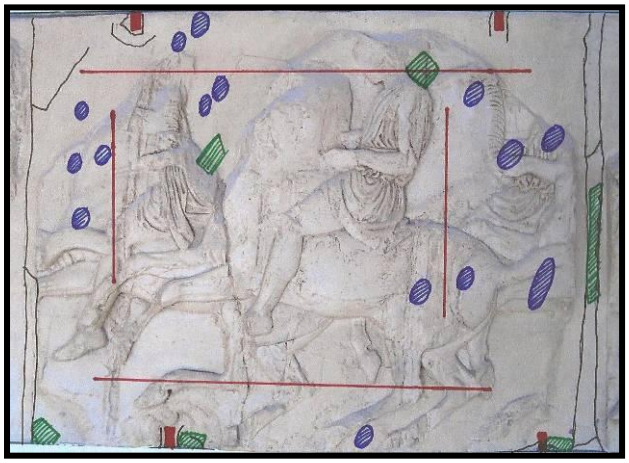
SURFACE DUST AND DIRT: Severe, 100% coverage.

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

CHIPS AND LOSS: Missing areas associated with the cracks**,** the majority of which are alongside the crack on sinister side of the panel; missing area around metal fixing on sinister side of the cast

ABRASIONS: Not significant

Cracks
Ferrous items inside plaster
Chips, abrasions and 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

1.1.6.3 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** shows several different colour layers.

1.1.6.4 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 on **Panel 1,** the surface of the cast 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.

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.

1.1.6.5 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

1.1.7.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 South Wall
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1260mm D: 50mm
Weight (approx):

1.1.7.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings in corner areas 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 splash scattered on surface of the panel and alongside bottom edge.

CHIPS AND LOSS: Missing areas associated with the cracks**,** the majority of which are alongside the crack on sinister side of the panel; missing area around metal fixing on sinister side of the cast.

ABRASIONS: Not significant

Cracks
Ferrous items inside plaster
Chips, abrasions and 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

1.1.7.3 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** shows several different colour layers.

1.1.7.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Panel 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.

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.

1.1.7.5 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

1.1.8.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1260mm D: 50mm
Weight (approx):

1.1.8.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixings in corner areas 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 spots of paint splash scattered on surface of the panel and alongside the bottom edge.

CHIPS AND LOSS: Missing areas associated with the cracks**;** missing area around metal fixing.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.8.3 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** shows several different colour layers.

1.1.8.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with inert filler to provide an 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.

1.1.8.5 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

1.1.9.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 9.
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1215mm D: 50mm
Weight (approx):

1.1.9.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; large crack above horses head in sinister top area of the panel; small cracks around fixing in dexter corner areas of the panel.

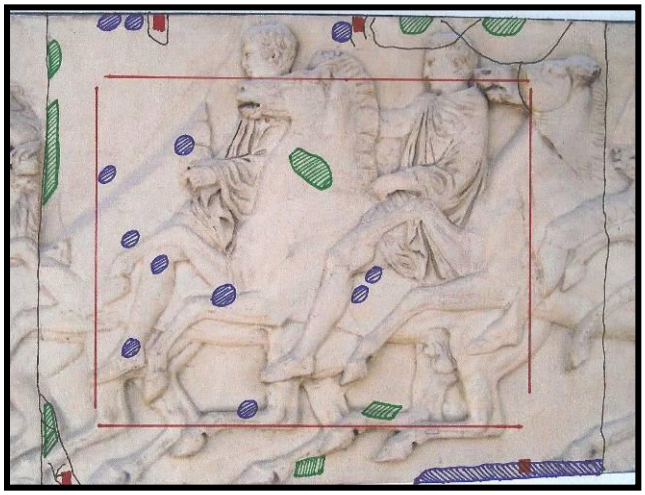
SURFACE DUST AND DIRT: Severe, 100% coverage

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

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks
Ferrous items inside plaster
Chips, abrasions and 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

1.1.9.3 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** shows several different colour layers.

1.1.9.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 field 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.

1.1.9.5 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

1.1.10.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1240mm D: 50mm
Weight (approx):

1.1.10.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixing in sinister bottom corner of the panel.

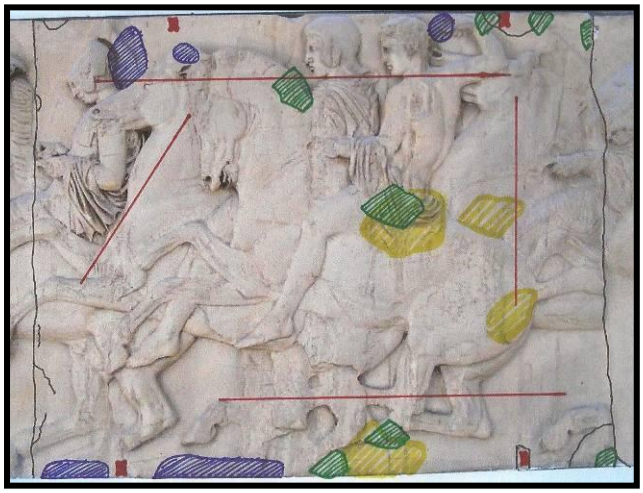
SURFACE DUST AND DIRT: Severe, 100% coverage.

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

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks
Ferrous items inside plaster
Chips, abrasions and 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

1.1.10.3 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** shows several different colour layers.

1.1.10.4 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 hosed vacuum to pick up loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 Primal B60A with 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 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.

1.1.10.5 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

1.1.11.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 11.
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1230mm D: 50mm
Weight (approx):

1.1.11.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Fair. Open cracks running alongside joints on both sides of the panel; small cracks around fixing in upper part 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 splash scattered on the surface of the panel; area of flaking paint on lower middle part of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks
Ferrous items inside plaster
Chips, abrasions and 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

1.1.11.3 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** shows several different colour layers.

1.1.11.4 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 hosed vacuum to pick up loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 with 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 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.

1.1.11.5 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

1.1.12.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 12.
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: 1300mm D: 50mm
Weight (approx):

1.1.12.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

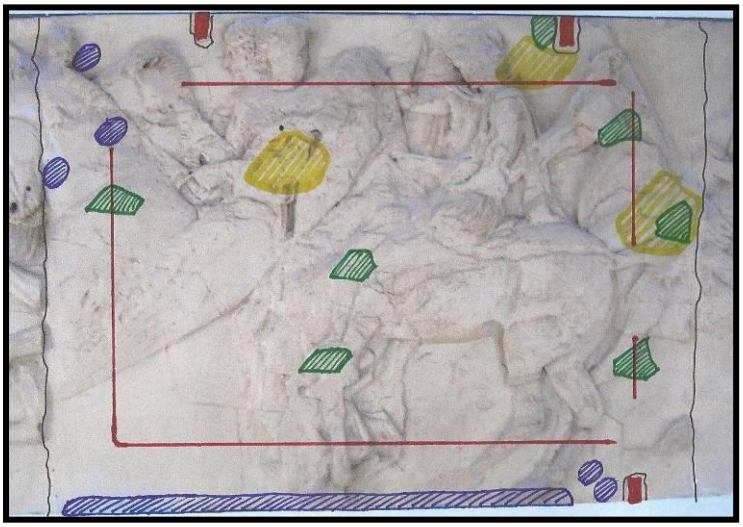
SURFACE DUST AND DIRT: Severe, 100% coverage

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

CHIPS AND LOSS: Missing areas associated with the cracks; three small areas of flaking paint.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.12.3 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** shows several different colour layers.

1.1.12.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 with 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 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.

1.1.12.5 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.

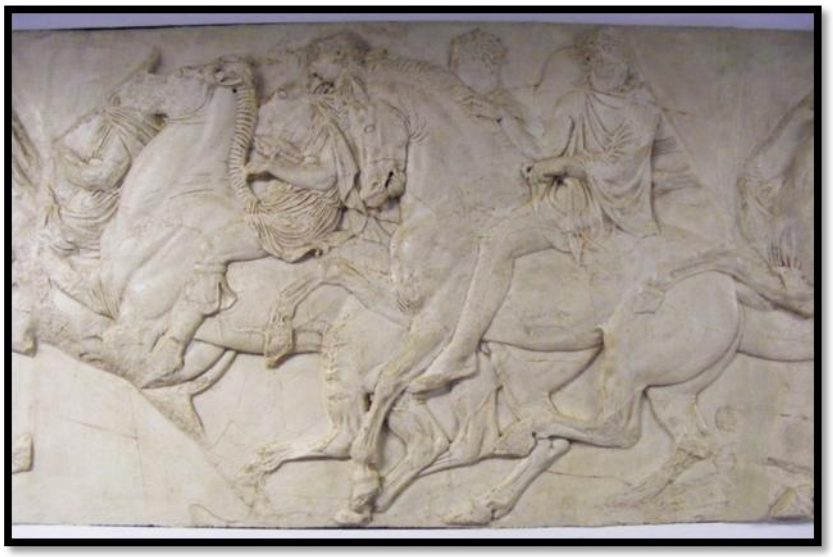
The cleaning programme would involve the trained operatives, wearing the appropriate PPE, removing the loose dust using soft brushes and a vacuum cleaner with a rubber nozzle that would have muslin attached to its end. The muslin prevents any potential damage to the plaster from being lost in the vacuum 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

1.1.13.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1440mm D: 50mm
Weight (approx):

1.1.13.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

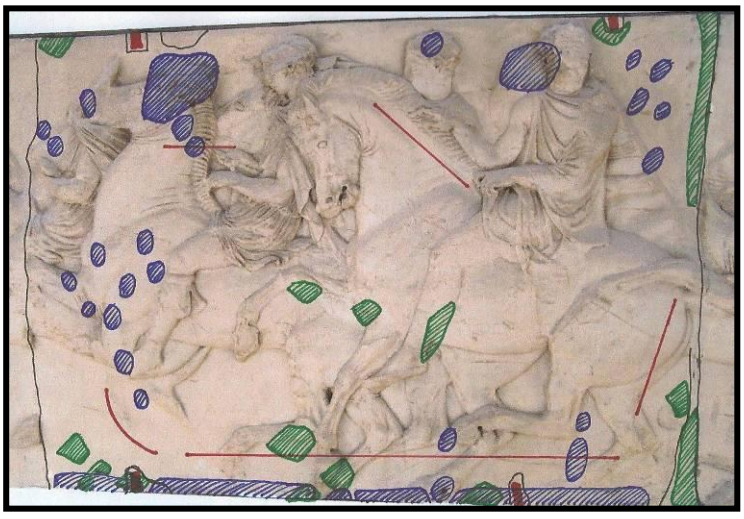
SURFACE DUST AND DIRT: Severe, 100% coverage.

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

CHIPS AND LOSS: Missing areas associated with the cracks, especially on sinister side of the panel; missing paint in lower and middle parts of the cast.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.13.3 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** shows several different colour layers.

1.1.13.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Panel 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.

Panel during works 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.

1.1.13.5 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

1.1.14.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 14.
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1600mm D: 50mm
Weight (approx):

1.1.14.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Stable. Open cracks running alongside joints on both sides of the panel and through the middle; small cracks around fixing in top corners of the panel.

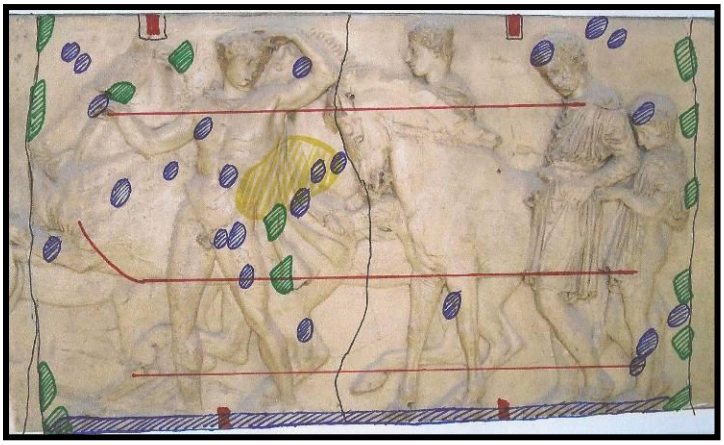
SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on surface of the cast; small spots of paint splash scattered on surface of the panel and alongside the bottom edge; flaking paint in middle part of the cast.

CHIPS AND LOSS: Missing areas associated with the cracks.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.14.3 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** shows several different colour layers.

1.1.14.4 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 hosed vacuum to pick up loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 with 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 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 works 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.

1.1.14.5 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

1.1.15.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 15.
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 740mm D: 50mm
Weight (approx):

1.1.15.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Stable. Open cracks running alongside joints on both sides of the panel, through the middle and in sinister corner.

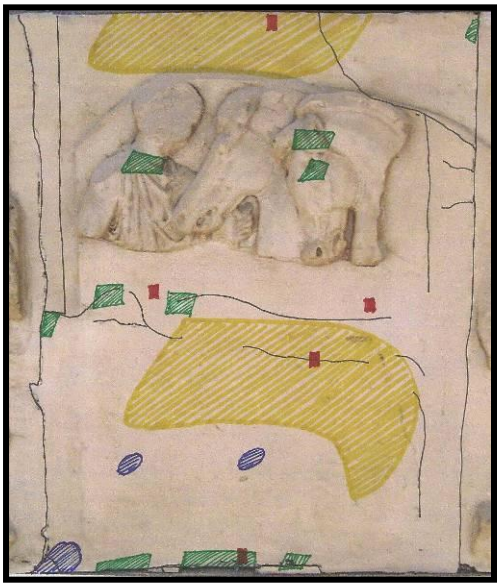
SURFACE DUST AND DIRT: Severe, 100% coverage.

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

CHIPS AND LOSS: Missing areas associated with the cracks and on bottom edge; flaking paint in middle and top part of the cast.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.15.3 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** shows several different colour layers.

1.1.15.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast 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 with 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 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 works on fills

- All the fills were then toned out with acrylics 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.

1.1.15.5 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

1.1.16.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South 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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1100mm D: 50mm
Weight (approx):

1.1.16.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Stable. Open cracks running alongside joints on both sides of the panel; small crack 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 surface of the cast; small spots of paint splash scattered on surface of the panel and by the bottom edge.

CHIPS AND LOSS: Missing areas associated with the cracks, the majority of which are on the sinister side and two sinister corners of the panel.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and 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

1.1.15.3 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** shows several different colour layers.

1.1.16.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Panel 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.

1.1.16.5 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

After conservation

1.1.17.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 17.
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1270mm D: 50mm
Weight (approx):

1.1.17.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

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

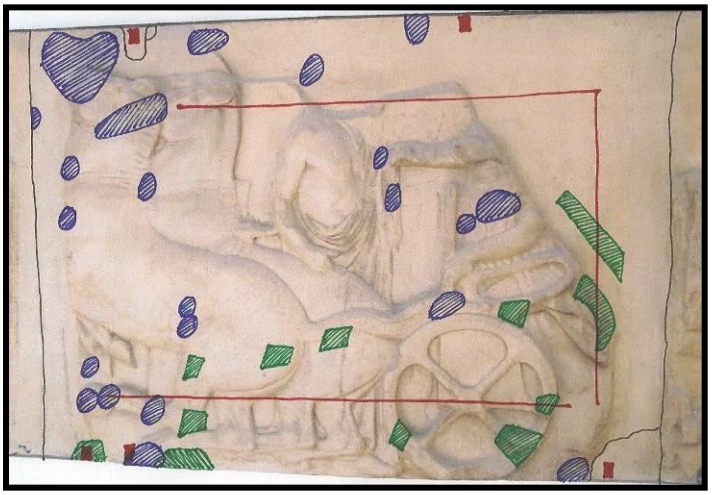
SURFACE DUST AND DIRT: Severe, 100% coverage.

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

CHIPS AND LOSS: Missing areas associated with the cracks, the majority of which are on lower part of the panel.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and missing surfaces
Paint splashes



PREVIOUS REPAIRS:

At the time of re-sitting 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

1.1.17.3 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** shows several different colour layers.

1.1.17.4 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 loose dust and dirt.

- Following wet cleaning spot tests on **Panel 1,** the surface of the cast was cleaned with 2-5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

Panel 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.

1.1.17.5 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.

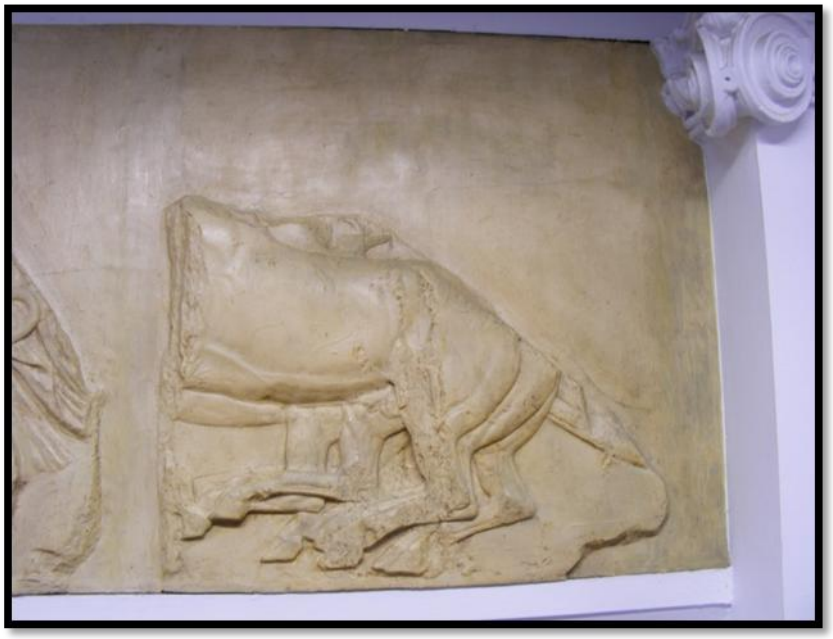
The cleaning programme would involve the trained operatives, wearing the appropriate PPE, removing the loose dust using soft brushes and a vacuum cleaner with a rubber nozzle that would have muslin attached to its end. The muslin prevents any potential damage to the plaster from being lost in the vacuum 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.

PANEL 18

Panel before conservation



Panel after conservation

1.1.18.1 DESCRIPTION OF THE OBJECT

TITLE: Parthenon Frieze, copy of the panel from Parthenon Frieze from Temple of Athena – Parthenon in Acropolis in Athens, Greece, between 443 and 438 B.C.
NUMBER(S): Sculpture Court, Upper Gallery South Wall, Panel 18.
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 South Wall.
DIMENSIONS/WEIGHT (APPROX): H: 1010mm W: 1120mm D: 50mm
Weight (approx):

1.1.18.2 BRIEF CONDITION REPORT BEFORE CONSERVATION

STRUCTURAL STABILITY: Stable. Open cracks running alongside joints on both sides of the panel and through the panel in its upper part; small crack around fixings in two bottom corners of the cast.

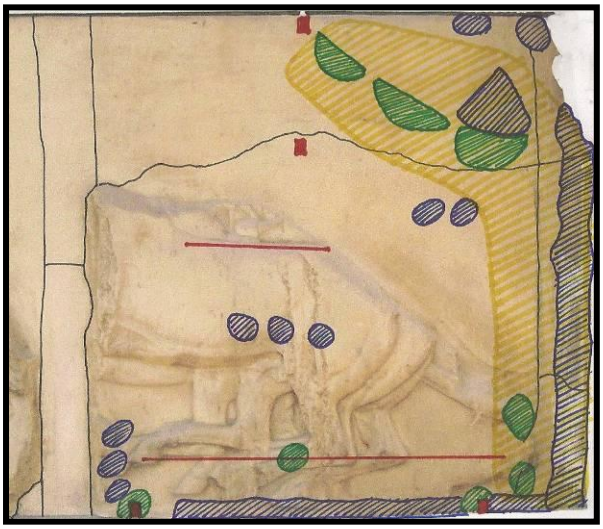
SURFACE DUST AND DIRT: Severe, 100% coverage.

VISIBLE PAINT LAYERS/UNSIGHTLY MARKINGS: Layer of cream-yellow paint/varnish on surface of the cast; small spots of paint splashes scattered on surface of the panel and especially on sinister and bottom edge of the panel.

CHIPS AND LOSS: Missing areas associated with the cracks, the majority of which are on the upper part of the panel.

ABRASIONS: Not significant

Cracks
Ferrous items under plaster
Chips, abrasions and missing surfaces
Paint splashes
Flaking paint



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- Following wet cleaning spot tests on **Panel 1,** the surface of the cast was cleaned with 5% Vulpex Liquid Soap in de-ionised water, using cotton wool swabs.

- Areas of flaking paint were consolidated with 5% Primal B60A with 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 with 12% Paraloid B72 in acetone. Larger areas of loss around the screws were filled with an inert filler to provide extra strength.

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