# RICHARD IRELAND • PLASTER & PAINT

### CONSULTANCY & CONSERVATION OF HISTORIC BUILDINGS

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Paint Report Revision B

3<sup>rd</sup> March 2023

Adam Cheltsov Studio Charlotte Harris 26 Store Street London WC1E 7BT

Dear Adam

### GERMAN HISTORICAL INSTITUTE – HISTORIC PAINT INVESTIGATION

Exploratory Architectural Paint research (APR) has been undertaken principally on the Conference Room and Common Room ceilings together with other selective surfaces at the German Historical Institute, No.17 Bloomsbury Square, London, instructed by Adam Cheltsov on behalf of the German Historical Institute. (See Plans A & B)

### 1.0 BRIEF INTRODUCTION & BACKGROUND CHRONOLOGY<sup>1</sup>

1.1 No.17 Bloomsbury Square is listed Grade II and occupies the north west corner of Bloomsbury Square. In 1777-78 John Nash developed what had been a single dwelling dating from the late seventeenth century into two large houses – one retaining its entrance onto Bloomsbury Square and the second gaining an entrance onto Great Russell Street. In 1841 the newly established Pharmaceutical Society (later Royal Pharmaceutical Society) took the lease of the southern building, acquiring Nos 72 and 73 Great Russell Street in 1857 and set about rejoining the buildings into one which had not been the case since Nash's alterations. During the early 1970s the building was threatened with demolition to make way for a proposed new British Library building but was opposed by the Bloomsbury Association formed for the purpose. No.17 was adopted by the German Historical Society in 1980 (formed in 1976) with alterations and refurbishment works completed in 1982. The site is within the Bloomsbury Conservation Area.

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<sup>&</sup>lt;sup>1</sup> Excerpt summarised from ICENI, German Historical Institute 17 Bloomsbury Square Heritage Statement, Final Draft 17/07/2019

### 2.0 PURPOSE

- 2.1 A limited exploratory paint investigation of ten samples each on two ceilings has been commissioned to establish earlier schemes and assist in proposing a change from the current decoration to a more sympathetic treatment than the extant c.1980s 'historic' decoration of the two principle decorative plaster ceilings on the first floor known as the Conference Room and Common Room.
- 2.2 Additionally, six further samples have been included for comparative purposes in an effort to establish if there might be evidence for the following:
  - a) The possible 1850s insertion of a partition wall in the ground floor reception.
  - b) Possible in situ retention of a 1770s Nash era fireplace in the ground floor reception.
  - c) Indicative treatment of the currently pink painted staircase of the northern building.

### 3.0 BRIEF

- 3.1 To undertake an overall assessment of the exploratory paint samples for the two first floor decorative plaster ceilings of the once independent southern building and in particular examine and ascertain where possible, the decorative treatments of the late 18<sup>th</sup> and 19<sup>th</sup> century phases of first Nash from 1777 and then the Royal Pharmaceutical Society from the 1840s.
- 3.2 To undertake an overall assessment of the exploratory paint samples of the ground floor reception west wall and fireplace of the once independent southern building together with the assessment of the cantilevered staircase that once formed the principal stairs to the northern of the two buildings designed by Nash in the late 1770s.

### 4.0 INVESTIGATION

- 4.1 A total of 26 paint samples were removed from representative elements of the ceilings and other surfaces by Richard Ireland and sent to Catherine Hassall to undertake the paint flake polarising microscopy examination. (See Appendix D)
- 4.2 Samples were removed in as logical sequence as possible commencing at the central area of the ceilings and moving outwards to the perimeter across the ceiling beds. (See list in Appendix B: Paint Sample Register)
- 4.3 Samples are illustrated in Appendix C: Illustrated Paint Sample Sites. (See figs 01-27)
- 4.4 The Catherine Hassall Microscopy Report is reproduced in Appendix D.
- 4.5 Note that though extensive, this does not constitute a definitive investigation and is of an 'exploratory' nature as, for instance, there are no repeated samples of the same elements in different areas and only selective surfaces and moulding variations and have been sampled. Nonetheless, sample sites have been chosen to provide as full a picture as practical within the intended scope and sample allowance.

### 5.0 SUMMARY DECORATIVE CHRONOLOGY

- 5.1 Prior to the later nineteenth-century refurbishment of the building, the Conference Room and Common Room have almost always been repainted at the same time and decorated in matching schemes using soft distemper.<sup>2</sup> Subsequently the ceilings were comprehensively cleaned down of their water soluble soft distemper paint leaving only traces of the earlier decorative schemes. There was no trace of oil paint for this earlier period in any of the samples taken across either of the two principal decorative ceilings.
- 5.2 The first post-nineteenth-century refurbishment scheme was of distemper applied over a sealing coat of white oil paint. Incomplete traces of blue and pink distemper were found in this scheme on the ceilings.
- 5.3 Both ceilings were decorated together with pink flatwork and white decorative relief, using an oil based undercoat and top coats of distemper to provide an even matt finish.
- 5.4 The decorative treatment of both ceilings seen today is derived from the 1980s.
- 5.5 The Reception Room west wall and north partition wall both have identical layers with no pre-nineteenth-century paint present. The pigments date the layers no earlier than circa 1814 when two of the pigments first became available. It is likely remodelling included a new entablature around the room perimeter.
- 5.6 The Reception Room fireplace is eighteenth-century with the ninth scheme according with the west wall and north wall second decoration. The earliest schemes were off-whites, pale greys, buff and stone colours. Following the nineteenth-century green wall scheme, dark brown, grey and then the present black scheme was used.
- 5.7 The Staircase began with stone coloured oil paints with a distinctly pink tone to the schemes that followed. The tenth scheme changed to a very dark reddish-brown for lower walls with a pale pinkish brown above. The most recent pink scheme follows on from a return to pale buff tones that had been used from the early twentieth-century.

### 6.0 CONFERENCE ROOM CEILING DECORATION (See Appendix D)

### 6.1 Early Layers

6.2 Traces were found of the early distemper layers in just one sample S8 caught in a groove of the decorative flame relief. The cross-section shows five or six layers of distemper with one pink scheme and one buff or yellow scheme. (See figs 01, 08)

<sup>&</sup>lt;sup>2</sup> Soft distemper is a mixture of whiting (crushed chalk) and pigment bound together with animal glue derived from skins and hooves typically referenced as Town Glue and Rabbit Skin Glue. Just sufficient glue is added to adhere the mixture to the surface and to itself. The glue binder is readily water soluble and would be washed off at each new decorative campaign as part of the preparation. Though traces of distemper can be found in awkward to clean crevices, it is unusual to be able to discover a full sequence that has not been partially or completely washed off.

### 6.3 Nineteenth-Century Refurbishment

6.4 No.1: Thinly applied distempers were used to decorate the ceiling with evidence of *white* in S5, S6 and S7 with *Prussian blue* in S8 and S9. (See figs 01, 07, 08)

### 6.5 Later Decorations

6.6 No.2: A second set of distempers was applied over the first using at least three colours – Pink tinted with *vermilion* S7 (See figs 01, 07)
Blue tinted with *Prussian blue* S1, S2, S3, S5, S6, S8 (See figs 01, 05-08)
White S4, S9 (See figs 01, 06, 08)

### 6.7 No.3: Pink & White Scheme

Change from distemper to oil paints. A pink oil paint tinted with *red oxide* and *red lake* was applied to the whole ceiling S4. (See figs 01, 06)

White oil paint was found on some samples used for the raised moulding. S8, S9 S10. (See figs (See figs 01, 08-09)

Overcoating the oil paint are thin layers of pink distemper tinted with *vermilion* and *white* distemper.<sup>3</sup>

- 6.8 No.4: The ceiling was painted entirely in white oil paint with a white distemper topcoat.
- 6.9 No.5: Some samples have a further thin layer of *white lead* oil paint over the previous scheme suggesting selective retouching. S7 (See figs 01, 08)

### 6.10 **1980 Decoration**

- 6.11 In some areas the earlier paint was cleaned off or lost, S10, but mostly the samples showed a thick layer of cream-coloured alkyd paint containing *titanium dioxide white*. (See figs 01, 09)
- 6.12 The ceiling was then painted in the same scheme seen today with oil gilding over a yellow oil size for the gilded elements.

### 6.13 Current Scheme

6.14 A sealant coat was applied in some areas suggesting instability or loss of some earlier paint layers and then the 1980s scheme was repeated in the same colours. S7 (See figs 01, 07)

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<sup>&</sup>lt;sup>3</sup> In the late nineteenth-century it was common practice to exploit the matt finish of distempers by applying them over a ground of coloured oil paint do achieving an even matt finish.

## 7.0 COMMON ROOM CEILING DECORATION (See Appendix D)

7.1 The ceiling in this room was treated in a very similar way to that of the Conference Room and both have almost always been painted together in the same set of colours. The only significant difference was an extra nineteenth-century scheme.

### 7.2 Traces of Early Layers

- 7.3 Remains of distempers were found in several samples most of which were white, but also yellow found in S13. (See figs 02, 13)
- 7.4 Whites were found in S12, S17, S18, S19. (See figs 02, 12, 17, 18)

### 7.5 Nineteenth-Century Refurbishment

- 7.6 In seven of the ten samples was a *lead white* oil overpaint mixed with *barium sulphate* which was frequently added to *lead white* as an extender in the nineteenth century. It was present in S12, S13, S14, S15, S17, S18, S19. (See figs 02, 12-15,17-18)
- 7.7 The paint consists of a single layer and may have been a coating applied to seal in the remains of early distempers. It does not look like a proper decoration. It was not used in the Conference Room.
- 7.8 As in the Conference Room, at some point this ceiling was decorated with distempers. A blue tinted with *Prussian blue* and *carbon black* was found in Samples 12, 13, 14 and 18. (See figs 02, 12-14, 18)
- 7.9 White only was found in samples S11, S17, S19 and S20. (See figs 02, 11, 17-18)

### 7.10 Later Decorations

7.11 No.2: In just one sample there is a second coating of white distemper over the first coating S17. (See figs 02, 17)

### 7.12 No.3: Pink & White Scheme

The third decoration was the same as the third decoration in the Conference Room: a pink and white scheme involving an undercoat of oil paint and a top coat of distempers. The tinting pigment in the pink distemper was *vermilion*. The layers are much more damaged compared to those in the Conference Room and the overlying distemper was only present in a few fragments.

Traces of a second lot of distemper were found in samples S17 and S19. These may just have been retouching. (See figs 02, 17-18)

7.13 No.4: The pink and white scheme was eventually completely covered over with a thin coat of white oil paint. This was based on *lead white* so must have been applied before the Second World War.

### 7.14 Post-1980 Decoration

- 7.15 In sample S16 there are no earlier paint layers and the late twentieth-century paints sit on gypsum plaster, so in some areas the earlier paints must have been cleaned off.
- 7.16 The late twentieth-century paint layers in this room are much less well preserved compared to those in the Conference Room. In some samples the same cream-coloured ground layer used in the other room is evident, but in other samples it is absent.
- 7.17 It looks as though the 1980 paint may have suffered damage at some point and was partly cleaned off and replaced with the paint scheme seen today.
- 8.0 RECEPTION ROOM DECORATION (See Appendix D)

#### 8.1 West wall and North Partition Wall

- 8.2 Sample S21 was taken from the North wall. Sample S22 was taken from the West wall.
- 8.3 No eighteenth-century layers were found. Exactly the same set of nineteenth and twentieth-century paint layers was present in both samples, so when the north stud wall was inserted, the other wall must have been extant or replastered to match. (See figs 03, 19-21)
- 8.4 No pre-nineteenth-century paints were present. The earliest two paints in the samples were a pair of green distemper schemes. The first was tinted with a mixture of *Prussian blue* and *chrome yellow*. *Chrome yellow* and *emerald green* were both first available in circa 1814.

### 8.5 Eighteenth-Century Fireplace

- 8.6 The wooden fire surround has been painted fifteen times with lead-based oil paint which means it is almost certainly an eighteenth-century feature. If it was installed in 1780, then it was being repainted approximately once every ten years. (See figs 03, 22-24)
- 8.7 The ninth paint scheme used on this fireplace was a pale green containing particles of *emerald green*. Green using that same pigment was used as a second scheme on the nineteenth-century partition wall. It seems that when the partition was inserted, the room was redecorated and green paint was used for the fireplace as well as for the entablature.
- 8.8 The earliest paints were a series of pale greys, or greyed whites. These were followed by some buff or stone-coloured schemes before the switch to green in the nineteenth century.
- 8.9 It must have been in the first half of the twentieth century that there was a change to dark brown. The first of the dark browns was painted over an undercoat that still contained *lead* white. In the second half of the twentieth century browns continued to be used, then there was a change to a series of greys, and finally the black scheme seen today.

### 9.0 STAIRCASE (See Appendix D)

9.1 Two samples were taken from the walls of the stairs: one from the back of the niche at the head of the stairs to the first floor, the other from below the present hand rail S25 and S 26. (See figs 25-27)

### 9.2 Earliest Surviving Paint

9.3 In both samples the first paint applied to the walls was a stone-coloured oil paint with a slightly greyish tone. It was laid on in two very thin coats and in some of the fragments it was barely visible.

### 9.4 Later Decorations

- 9.5 No.2: The second scheme was a stone-colour but a few particles of *red lead* were added to the mixture giving it a pinkish tone.
- 9.6 Nos 3&4: The next two schemes were distinctly pink. *Iron oxide red* was added to the *lead white* and in the second scheme a few particles of *vermilion* were also present
- 9.7 No.5: A warm grey scheme over quite a dark undercoat.
- 9.8 Nos 6-8: Three buff or stone-coloured schemes.
- 9.9 No.9: Another buff scheme, but this one had a thin brown varnish over the top.
- 9.10 No.10: A very dark reddish-brown scheme with varnish on top used for the lower wall, but a paler, pinkish brown used for the back of the niche. Both schemes had varnish over the top and may have been types of graining.<sup>4</sup>
- 9.11 No.11: Further paint layers on the varnished brown.
- 9.12 No.12: It must have been in the first half of the twentieth century that the walls were returned to pale tones and a buff colour was used in both samples. The paint was based on *zinc* white.
- 9.13 Since the 1950s, and the introduction of paints based on *titanium dioxide white*, the staircase has been painted three time. Initially with cream-coloured schemes, and most recently with the pink seen today.

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<sup>&</sup>lt;sup>4</sup> Emulation of wood – especially higher status timbers such as oak, was common practice in the late nineteenth-century when the craft reached a particularly high state of realism. It was significantly cheaper to achieve such exotic effects with paint than going to the expense and difficulty to achieving the same design in the emulated timber.

### 10.0 DISCUSSION

### 10.1 The Conference Room and Common Room Ceilings

- 10.2 The earliest decoration of the two principal ceilings indicates they were originally painted with soft distempers. There is evidence of pink and of white used on the Conference Room ceiling together with a buff or yellow colour at a later scheme, the yellow also found in a single sample on the Common Room ceiling. However, the scarcity of evidence across the twenty samples between these two ceilings means no meaningful disposition of colouring can be established for these earliest schemes.
- 10.3 Use of a blue and white was found for both ceilings after the nineteenth-century refurbishment together with pink in the Conference Room only, though again, surviving evidence is sparse due to the schemes being based on soft distemper.
- 10.4 The use of oil paint provides the first permanent scheme found on the ceilings and shared across both rooms comprised pink flatwork with off-white decorative relief and versions of the same scheme appear to have been extant until covered over with white before c.1940.
- 10.5 The introduction of differing schemes between the rooms together with gilding and the 'naturalistic' treatment of enrichment in the Conference Room occurred from the 1980s and has since been repeated in the same colours a second time which is the scheme visible today.
- 10.6 The most complete evidence dating from the first application of oil-based paint indicates that both ceilings had pink grounds with off white decorative relief.
- 10.7 However, an entirely soft distemper decorative treatment preceded the oil-based scheme with both pink and blue flatwork providing a ground for off-white decorative relief.

### 10.8 Reception Room Walls

10.9 The samples taken from similar areas of the frieze ground on the west solid wall and north stud wall display identical layers, but with no eighteenth-century paint layers present. Even with extensive cleaning, it would be unlikely that all particles of earlier soft distemper could have been cleaned from the recesses of the frieze. As the earliest date that *chrome yellow* and *emerald green* became available for use is 1814, it seems the most likely interpretation is remodelling of the room was undertaken in the early part of the nineteenth-century with a new entablature installed around the room perimeter.

### 10.10 Eighteenth-century Fireplace

10.11 The pale green treatment of the ninth scheme on the fireplace using *emerald green*, the same pigment present on the second scheme of the wall frieze, further correlates with remodelling of the room after 1814, whilst retaining the eighteenth-century fireplace in situ. It suggests the room was predominantly decorated in shades and tints of green for this scheme.

### 10.12 Staircase

- 10.13 Oil paints were used on the staircase from the start, so like the eighteenth-century fireplace in the Reception Room, there is a more complete record of paint layers than for the ceilings.
- 10.14 Stone colours were the first decorative treatments, which gave way to distinctly pink toned colours, coeval with the pink and white ceilings of the Conference Room and Common Room, before a return to buff and stone colours. This was interrupted by the dark grained scheme of the late nineteenth-century after which it was returned to pale buff tones in the first half of the twentieth century. The last three schemes since the 1950s replicated pale tones for the first two, before the strong pink treatment extant today.

### 11.0 CONCLUSION

- 11.1 Reinstatement of the decoration of the two ceilings to a more appropriate pink and white or pink, blue and white scheme is supported by the investigation. However, a three colour scheme using pink and blue for the flatwork would be speculative due to the paucity of samples to determine disposition. This in itself should not be an obstacle if seeking a sympathetic scheme guided by the evidence.
- 11.2 The simplest treatment and best supported historic scheme would be a dulled pink flatwork and off-white decorative relief which appears to have been the treatment since the establishment of the Pharmaceutical Society (later Royal Pharmaceutical Society)1857 alterations and rejoining the two buildings. (See Plates 1-2 Appendix A)
- 11.3 A more elaborate and speculative scheme would employ both pink and blue flatwork with off-white decorative relief which may have preceded the later alterations to the building carried out after 1841. (See Plates 3-4 Appendix A)
- 11.4 The Reception Room perimeter entablature appears to date from the first part of the nineteenth century at the earliest suggesting it was installed as part of the room's remodelling.
- 11.5 The Reception Room fireplace is eighteenth century.
- 11.6 The staircase has mostly been painted in pale stone and buff colours, though a pink tone was introduced possible coeval with the pink ceiling treatment. The current scheme is considerably darker than the earlier treatments save the late nineteenth-century dark reddish-brown grained scheme.

Richard Ireland

Richard Speland

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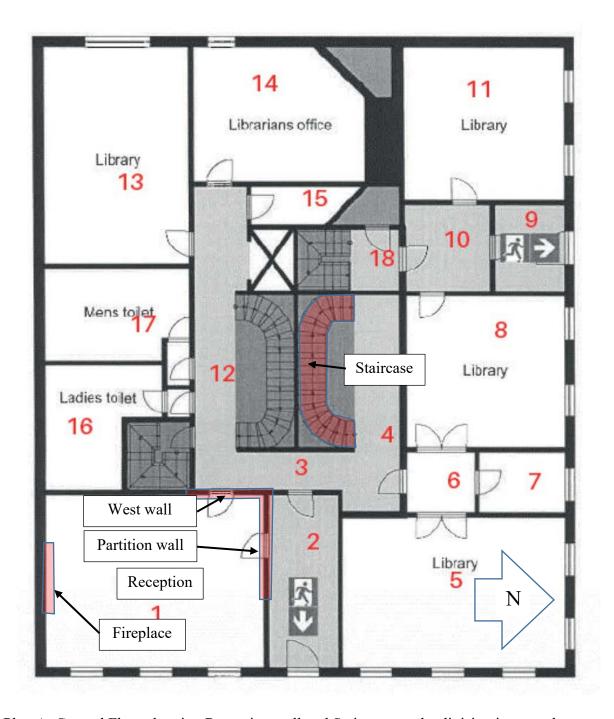
# APPENDIX A

FLOOR PLANS

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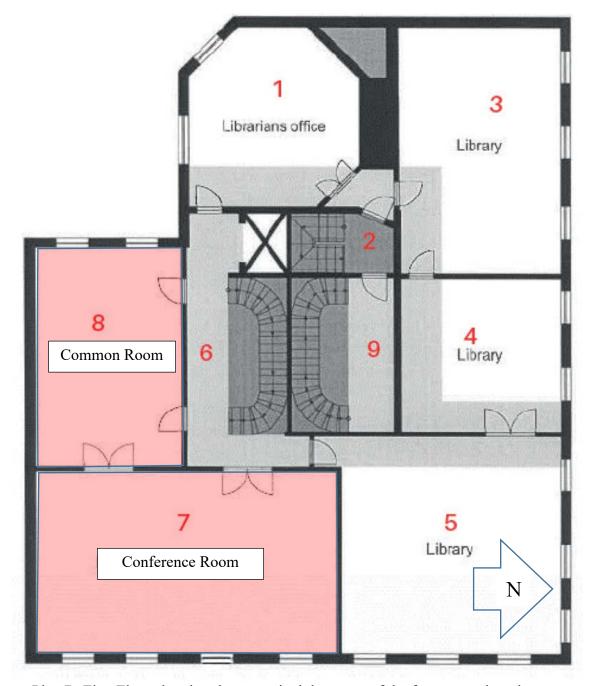
INDICATIVE HISTORIC CEILING DECORATION EXAMPLES

# GERMAN HISTORICAL INSTITUTE – GROUND FLOOR



Plan A Ground Floor showing Reception wall and Staircases at the division into two houses

### GERMAN HISTORICAL INSTITUTE – FIRST FLOOR



Plan B First Floor showing the two principle rooms of the former southern house.

# KENWOOD HOUSE, HAMPSTEAD, LONDON



Plate 1 Reinstatement of Robert Adam 1770s Library decoration detail of entablature



Plate 2 Emulation of Lead white relief and vermillion and red lake tinted flatwork

# PORTLAND PLACE, LONDON



Plate 3 Reinstatement of c.1790s to A 1774 first floor ceiling



Plate 4 Emulation of lead white relief with Prussian blue and vermillion tinted flatwork

# APPENDIX B

# PAINT SAMPLE REGISTER

# CONFERENCE ROOM CEILING – 10 No. SAMPLES: S1-S10 (See figs 01, 03-09)

|     | Sampled Item                  | Extant Finish    |
|-----|-------------------------------|------------------|
| S1  | Leaf lobe & ground            | green/buff       |
| S2  | Swag                          | gilded/buff      |
| S3  | Ground outside scallop        | red              |
| S4  | Bay leaf stem & ground        | white/blue       |
| S5  | Acanthus leaf & ground        | green/pale green |
| S6  | Husk drop                     | gilded/dull pink |
| S7  | Medallion face & edge         | blue             |
| S8  | Flame                         | gilded/buff      |
| S9  | Perimeter ground              | blue             |
| S10 | Cornice soffit guilloche band | gilded           |

### COMMON ROOM CEILING – 10 No. SAMPLES: S11-S20 (See figs 02, 10-18)

| S11<br>S12 | Husk tip & ground<br>Swag & ground? | off white/green Off white/yellowy glaze |
|------------|-------------------------------------|---|
| S13        | Amphora lid bead                    | gilded over red                         |
| S14        | Attenuated perimeter panel ground   | green-blue                              |
| S15        | Surviving/retained paint flake      | green                                   |
| S16        | Urn bowl leaf                       | red                                     |
| S17        | Vitruvian scroll leaf enrichment    | blue                                    |
| S18        | Cornice upper moulding              | green                                   |
| S19        | Cornice soffit moulding             | gilded                                  |
| S20        | Frieze ground                       | green                                   |

### RECEPTION ROOM – 4 No. SAMPLES: S21-S24 (See figs 03, 19-24)

| S21 | North partition wall frieze bead & ground | white                |
|-----|---|----------------------|
| S22 | West partition wall frieze bead & ground  | white                |
| S23 | Fireplace Ionic volute                    | black & compo/filler |
| S24 | Fireplace fillet                          | black & timber       |

# STAIRCASE TO FORMER NORTH HOUSE – 2 No. SAMPLES: S25-S26 (See figs 25-27)

| S25 | Wall dado ground | pink + earlier oak graining |
|-----|------------------|-----------------------------|
| S26 | Wall upper niche | pink/peach                  |

# APPENDIX C

# ILLUSTRATED PAINT SAMPLE SITES

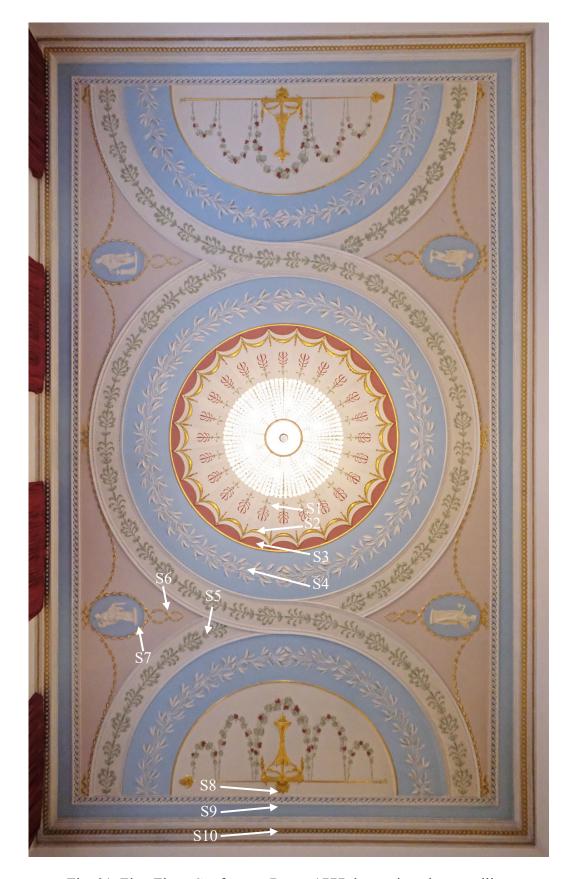


Fig. 01 First Floor Conference Room 1777 decorative plaster ceiling



Fig. 02 First Floor Common Room1777 decorative plaster ceiling



Fig. 03 East elevation of German Historical Society at Bloomsbury Square

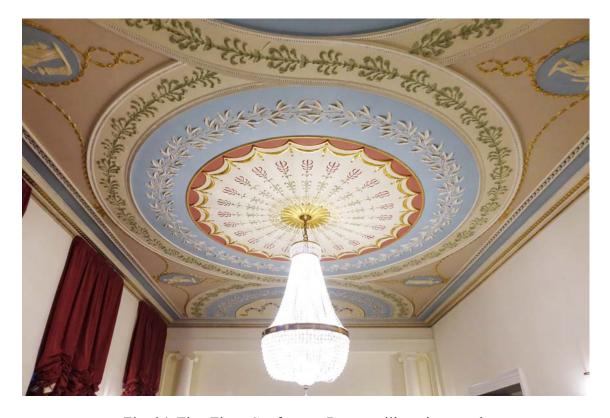


Fig. 04 First Floor Conference Room ceiling view south



Fig. 05 S1: green leaf and ground

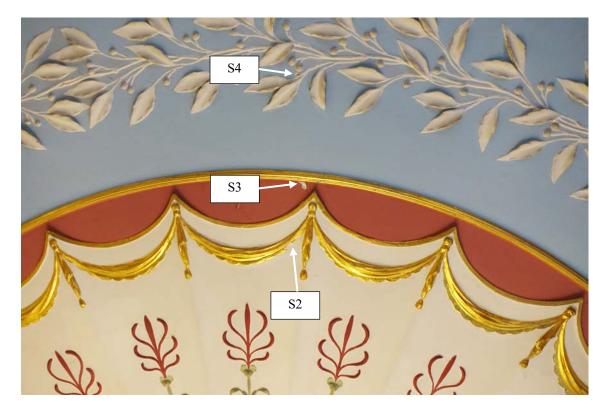


Fig. 06 S2: gilded swag; S3 red ground; S4 leaf stem & blue ground

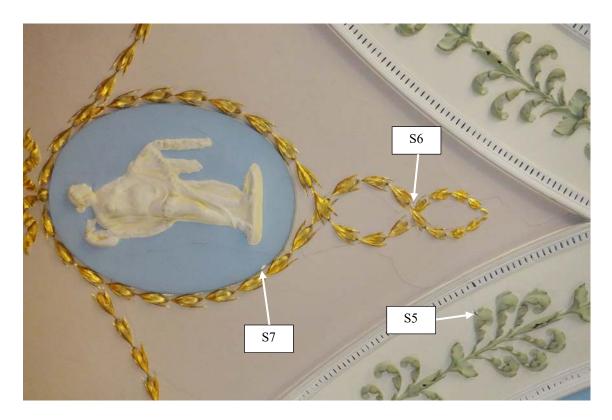


Fig. 07 S6: gilded husk & ground; S5: green leaf & ground; S7: blue medallion edge

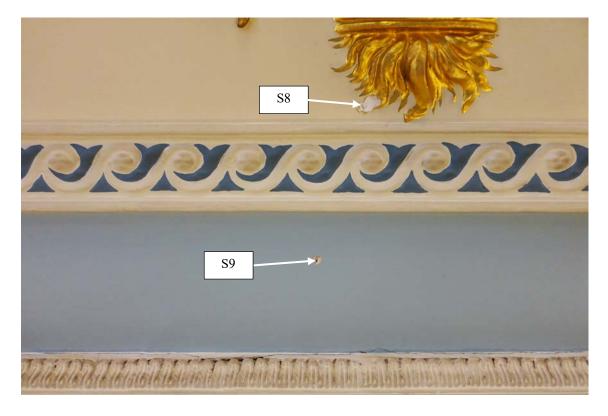


Fig. 08 S8: gilded flame; S9: blue perimeter ground

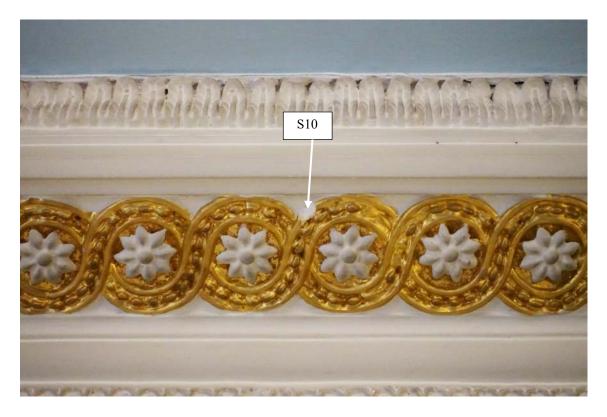


Fig. 09 S10: gilded guilloche band to cornice soffit



Fig. 10 First Floor Common Room ceiling view west

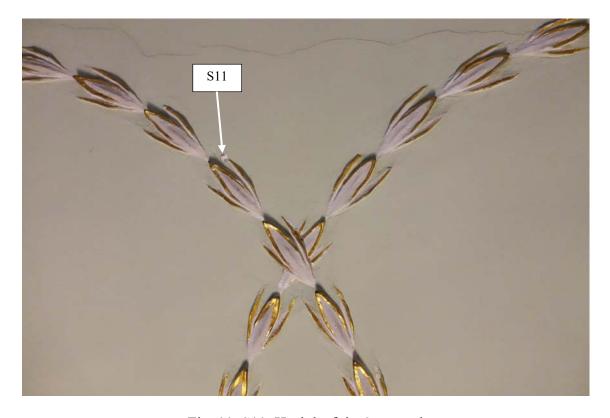


Fig. 11 S11: Husk leaf tip & ground

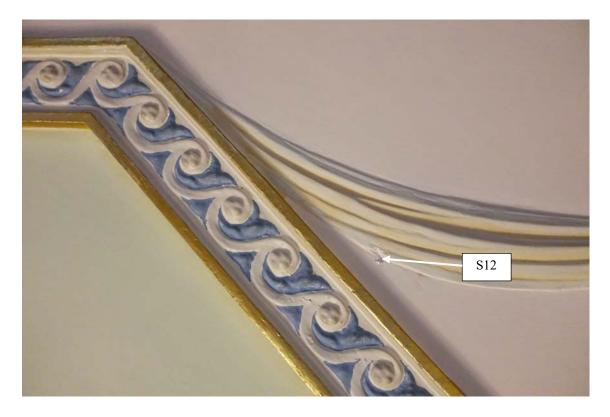


Fig. 12 S12: Swag & ground

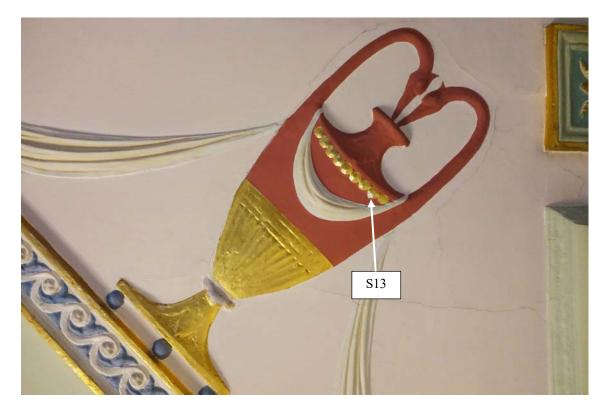


Fig. 13 S13: Amphora gilded bead



Fig. 14 S14: attenuated panel blue-green ground



Fig. 15 S15: green ground at point of retained paint flake



Fig 16 S16: Urn leaf

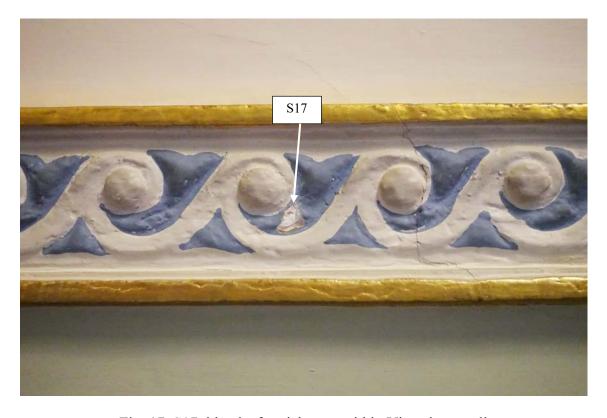


Fig. 17 S17: blue leaf enrichment within Vitruvian scroll

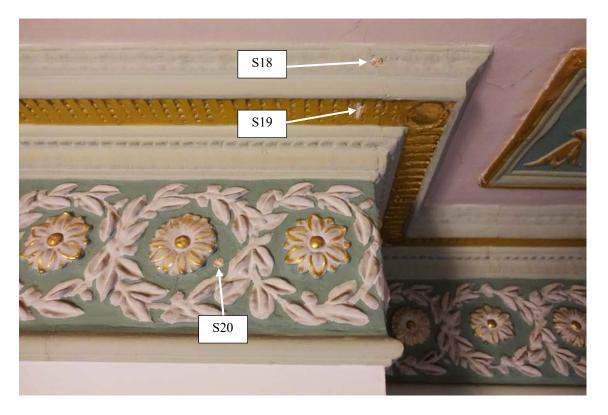


Fig. 18 S18: upper moulding; S19: gilded soffit enrichment; S20: frieze green-blue ground

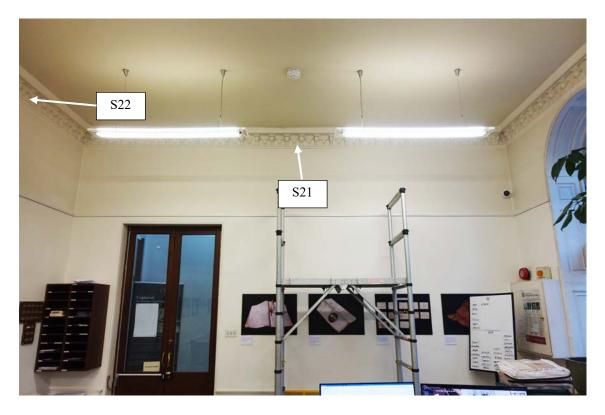


Fig. 19 Ground floor Reception view north towards partition wall



Fig. 20 Entablature on north elevation S21: berry & ground



Fig. 21 Entablature on west elevation S22: berry/ground



Fig. 22 Fireplace on south elevation of Reception



Fig. 23 Sample from beneath volute of dexter side hard against wall

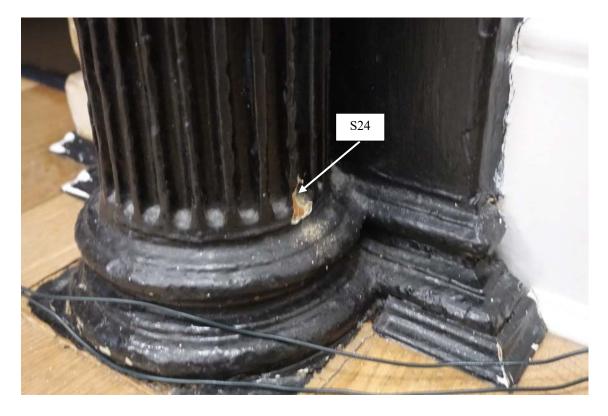


Fig. 24 Sample from timber fillet

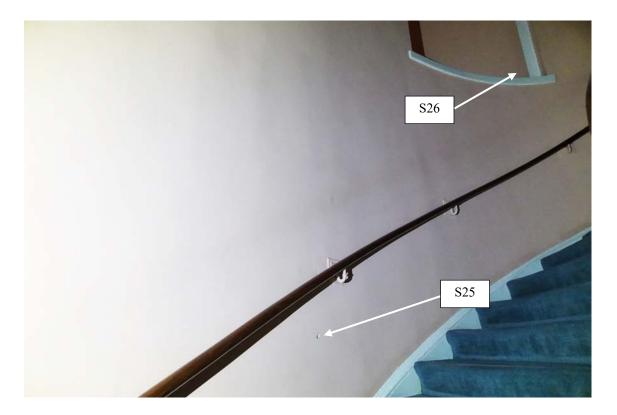


Fig. 25 Cantilevered stairs of former northern house

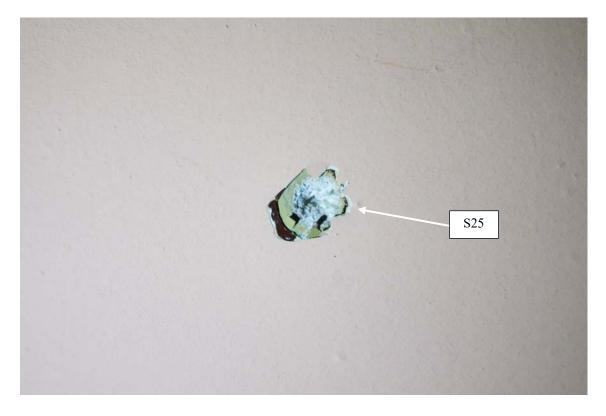


Fig. 26 S25: from dado included oak graining at a later scheme

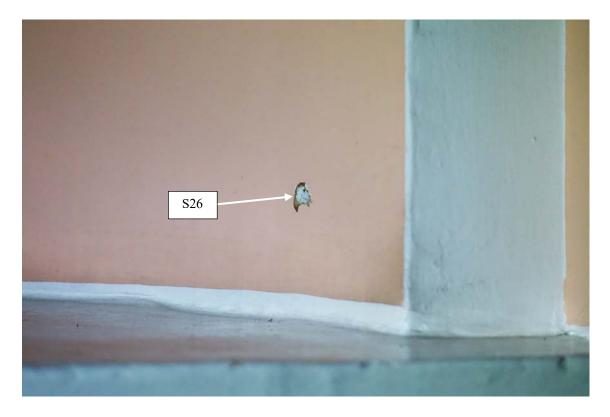


Fig. 27 S26: from niche at head of stairs to first floor

# APPENDIX D

PAINT ANALYSIS REPORT

C Hassall Report No.D058

February 2023

1

# GERMAN HISTORICAL INSTITUTE

Paint samples were taken by Richard Ireland from the following locations, as marked on photographs in his report:

| S1<br>S2<br>S3<br>S4<br>S5<br>S6<br>S7<br>S8<br>S9<br>S10          | CONFERENCE ROOM – 10 No. SAMPLES (01-10) Leaf lobe & ground Swag Ground outside scallop Bay leaf stem & ground Acanthus leaf & ground Husk drop Medallion face & edge Flame Perimeter ground Cornice soffit guilloche band  | green/buff gilded/buff red white/blue green/pale green gilded/dull pink blue gilded/buff blue gilded              |
|--|---|---|
| S11<br>S12<br>S13<br>S14<br>S15<br>S16<br>S17<br>S18<br>S19<br>S20 | COMMON ROOM – 10 No. SAMPLES (11-20) Husk tip & ground Swag & ground? Amphora lid bead Attenuated perimeter panel ground Surviving/retained paint flake Urn bowl leaf Vitruvian scroll leaf enrichment Cornice upper moulding Cornice soffit moulding Frieze ground | off white/green Off white/yellowy glaze gilded over red green-blue green red blue green gilded green gilded green |
| S21<br>S22<br>S23<br>S24   | RECEPTION – 4 No. SAMPLES (21-24)<br>North partition wall frieze bead & ground<br>West partition wall frieze bead & ground<br>Fireplace Ionic volute<br>Fireplace fillet  | white white black & compo/filler? black & timber  |
| S25<br>S26   | STAIRS TO FORMER NORTH HOUSE – 2 No. SAMPLES Wall dado ground Wall upper niche  | (25-26)<br>pink + earlier oak graining<br>pink/peach  |

<u>Examination</u>. The fragments were examined under low magnification and then the pieces were mounted in cold-setting polyester resin to be cut and polished as cross-sections.

The layers were compared, and key pigments were identified using a polarising light microscope.

A chemical test for lead was carried out on representative cross-sections.

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#### COMMON ROOM & CONFERENCE ROOM CEILINGS

From the samples it is clear that when the building was refurbished in the later nineteenth century, the ceilings were extremely thoroughly cleaned down, and very little has survived from the eighteenth and early nineteenth century.

Prior to that nineteenth-century refurbishment the ceilings must have always been painted with distempers as these would have been easy to remove. No traces of early oil paints were found.

Since the nineteenth-century refurbishment the two rooms have almost always been repainted at the same time., and the same colour schemes used.

### CONFERENCE ROOM

### Traces of early layers

Sample 8 [see p.10] was taken from the edge of a moulding depicting flames and here early layers survived in a groove. In the cross-section we can see a build-up of five or six layers of distemper. Most of these were white, but there was a pink one tinted with particles of vermilion, and one contained some iron oxide which was a buff or yellow colour.

In the cross-sections made from Samples 5 [p.9] and 7 [p.9] we can see just a single layer of white distemper on the lime plaster.

In the other samples there was nothing.

### Nineteenth-century refurbishment

The early distempers were washed off. In some areas, such as Sample 3, some filler was used. Filler was also used over the remains of early distempers in Sample 8

Distempers were then used to decorate the ceiling. They were very thinly applied.

A white distemper was found in Samples 5, 6 and 7.

A blue distemper tinted with Prussian blue was found in Samples 8 and 9.

### Later decorations

A second lot of distemper was applied over the first. This involved at least three colours Pink tinted with vermilion was found in Sample 7
Blue tinted with Prussian blue and some finely-ground carbon black was found in Samples 1, 2, 3, 5, 6 and 8
White was found in Samples 4 and 9.

### 3 Pink and White scheme

The third time that the ceiling was painted there was a change to oil paints.

A pink oil paint tinted with red iron oxide and a small amount of red lake was applied to the whole ceiling, presumably as the background colour. [see Sample 4, p.8]

In some samples we can see that there is a layer of white oil paint over the pink, and this must have been what was used for the raised mouldings. It was found in Samples 8, 9 and 10.

On top of the pink and white oil paints are thin layers of pink and white distemper, the pink tinted with vermilion. These may have been a later decoration, but it is more likely they were the final coat of the third decoration. In the late nineteenth-century it was quite common practice to lay distempers over oil paint undercoats, as this produced a very even finish, while still keeping the matt texture of distemper.

- 4 Perhaps in the early twentieth century the ceiling was all painted white. This involved a thin coat of white oil paint and a top coat of white distemper.
- Some retouching appears to have been carried out at some point, because just a few samples show a very thin layer of lead white oil paint over the earlier scheme [Sample 7, p.9].

#### 1980 decoration

In some areas the early layers were all cleaned off [Sample 10, p.11]. But in most samples the early layers were simply covered by a very thick coat of cream-coloured alkyd paint containing titanium dioxide white

The ceiling was then painted in the same colours as seen today, with oil gilding over a yellow oil size used for the gold areas

#### Most recent scheme

In some areas a coat of sealant was applied [Sample 7, p.9], suggesting that the earlier paint layers may have become unstable, and then the 1980 scheme was repeated, using the same set of colours.

# **COMMON ROOM**

As mentioned above, the ceiling in this room has been treated in a very similar way to the one in the Conference Room and since the later nineteenth-century the two ceilings have almost always been painted with the same set of colours..

The only significant difference was an extra nineteenth century paint scheme which suggests that some work was done on this ceiling at a slightly earlier stage compared to the Conference Room ceiling

The original lime plaster found in some samples [11 & 12] contained fine grit particles. In Sample 13 taken from an amphora, gypsum plaster was found under the paint layers.

### Traces of early layers

Remains of distempers were found in several samples. Most were white, but there was a yellow distemper found in Samples 13 [p.12] and 14.

Whites only were found in Samples 12, 17, 18 [p.12] and 19 [p.13].

#### Nineteenth-century refurbishment

On top of those early distempers, in seven of the ten samples, was a white oil paint layer based on lead white. This paint layer was mixed with particles of barium sulphate which was frequently added to lead white as an extender in the nineteenth century. It was present in Samples 12, 13, 14, 15, 17, 18 and 19. See Sample 13, p.12. It was not used in the Conference Room.

The paint consists of a single layer and may have been a coating applied to seal in the remains of early distempers. It does not look like a proper decoration.

At some point, as in the Conference Room, this ceiling was decorated with distempers. A blue tinted with Prussian blue and carbon black was found in Samples 12, 13, 14 and 18. White only was found in Samples 11, 17, 19 and 20.

#### Later decorations

2 In just one sample [17] there is a second lot of white distemper over the first

#### 3 Pink and White scheme

The third decoration was the same as the third decoration in the Conference Room: a pink and white scheme involving an undercoat of oil paint and a top coat of distempers. The tinting pigment in the pink distemper was vermilion. The layers are much more damaged compared to those in the Conference Room and the overlying distemper was only present in a few fragments.

Traces of a second lot of distemper were found in Samples 17 and 19. These may just have been retouching.

The pink and white scheme was eventually completely covered over with a thin coat of lead white oil paint. This was based on lead white so must have been applied before the Second World War.

### Post-1980 decoration

In Sample 16 there are no earlier paint layers and the late twentieth-century paints sit on gypsum plaster, so in some areas the earlier paints must have been cleaned off.

The late twentieth-century paint layers in this room are much less well preserved compared to those in the Conference Room. In some samples we can see the same cream-coloured ground layer that was used in the other room, but in other samples it is absent.

It looks as though the 1980 paint may have suffered damage at some point and was partly cleaned off and replaced with the paint scheme seen today.

# RECEPTION ROOM

## Possible partition wall

Sample 21 was taken from the North wall. Sample 22 was taken from the West wall.

No eighteenth-century layers were found. Exactly the same set of nineteenth and twentieth-century paint layers was present in both samples [see Sample 21, p.13], so when a partition was inserted, the other wall must have been replastered to match.

No pre-nineteenth-century paints were present. The earliest two paints in the samples were a pair of green distemper schemes. The first was tinted with a mixture of Prussian blue and chrome yellow. Chrome yellow and emerald green were both first available in circa 1814.

#### Eighteenth-century Fireplace

The wooden fire surround has been painted fifteen times with lead-based oil paint which means it is almost certainly an eighteenth-century feature. If it was installed in 1780, then it was being repainted approximately once every ten years [see Sample 23, p.14].

The ninth paint scheme used on this fireplace was a pale green containing particles of emerald green. Green using that same pigment was used as a second scheme on the nineteenth-century partition wall. It seems that when the partition was inserted, the room was redecorated, and green paint was used for the fireplace as well as for the entablature.

The earliest paints were a long series of pale greys, or greyed whites. These were followed by some buff or stone-coloured schemes before the switch to green in the nineteenth century.

It must have been in the first half of the twentieth century that there was a change to dark brown. The first of the dark browns was painted over an undercoat that still contained lead white. In the second half of the twentieth century browns continued to be used, then there was a change to a series of greys, and finally the black scheme seen today.

# **STAIRCASE**

Two samples were taken from the walls of the stairs: one from the back of the niche at the head of the stairs to the first floor, the other from below the present hand rail [see Sample 25, p.15 and Sample 26, p.16].

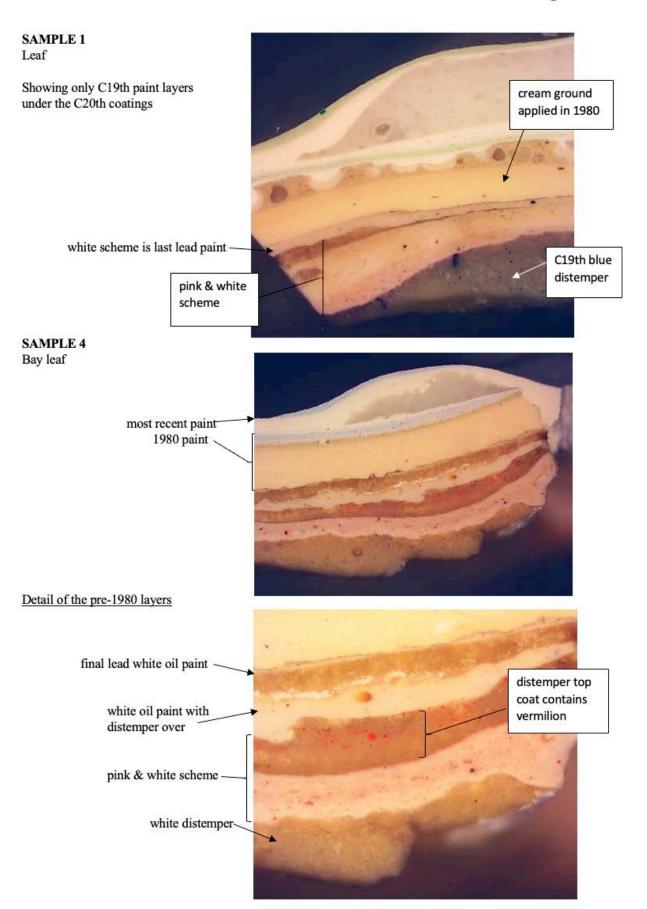
# Earliest paint on the plaster

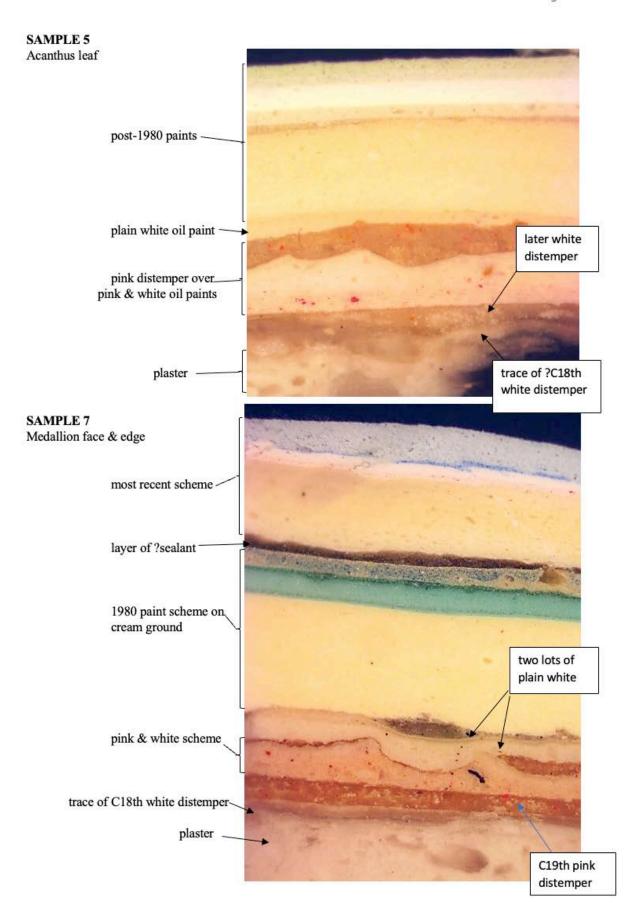
In both samples the first paint applied to the walls was a stone-coloured oil paint with a slightly greyish tone. It was laid on in two very thin coats, and in some of the fragments it was barely visible.

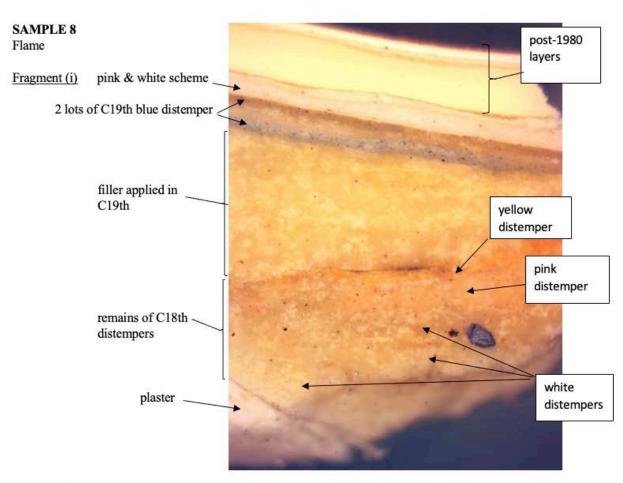
### Later decorations

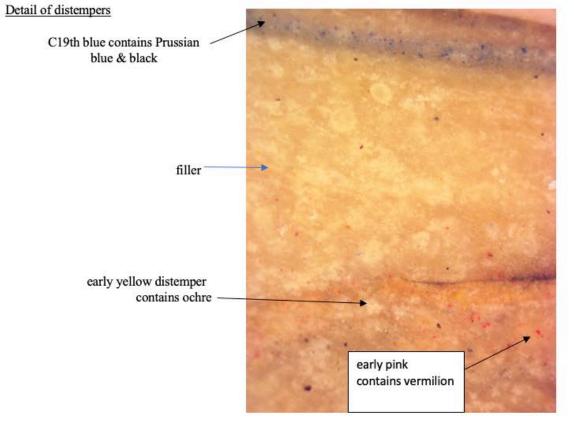
- The second scheme was also a stone-colour but a few particles of red lead were added to the mixture and it had a pinkish tone.
- 3&4 The next two schemes were distinctly pink. Iron oxide red was added to the lead white, and in the second scheme a few particles of vermilion were also present
- 5 A warm grey scheme, over quite a dark undercoat.
- 6-8 Three buff or stone-coloured schemes
- Another buff scheme, but this one had a thin brown varnish over the top.
- A very dark reddish-brown scheme with varnish on top was used for the lower wall, but a paler, pinkish brown was used for the back of the niche. Both schemes had varnish over the top and may have been types of graining.
- further paint layers on the varnished brown
- It must have been in the first half of the twentieth century that the walls were returned to a pale tones, and a buff colour was used in both samples. The paint was based on zinc white.

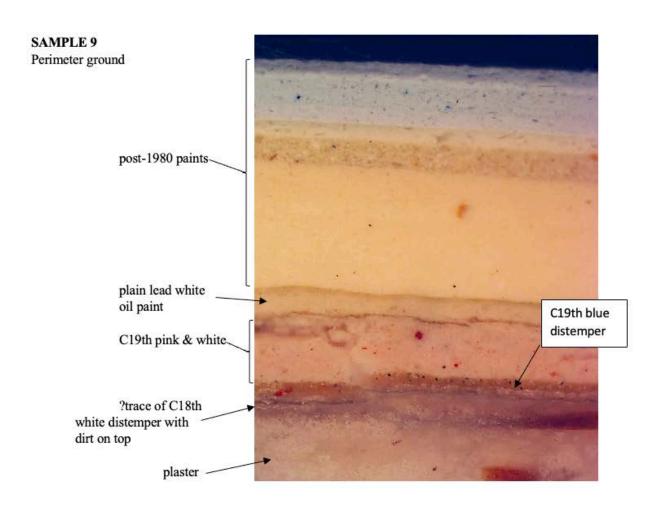
Since the 1950s, and the introduction of paints based on titanium dioxide white, the staircase has been painted three time. Initially with cream-coloured schemes, and most recently with the pink seen today.

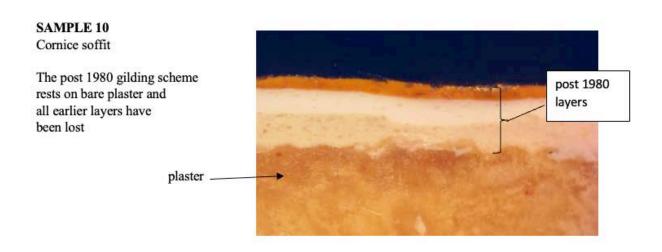


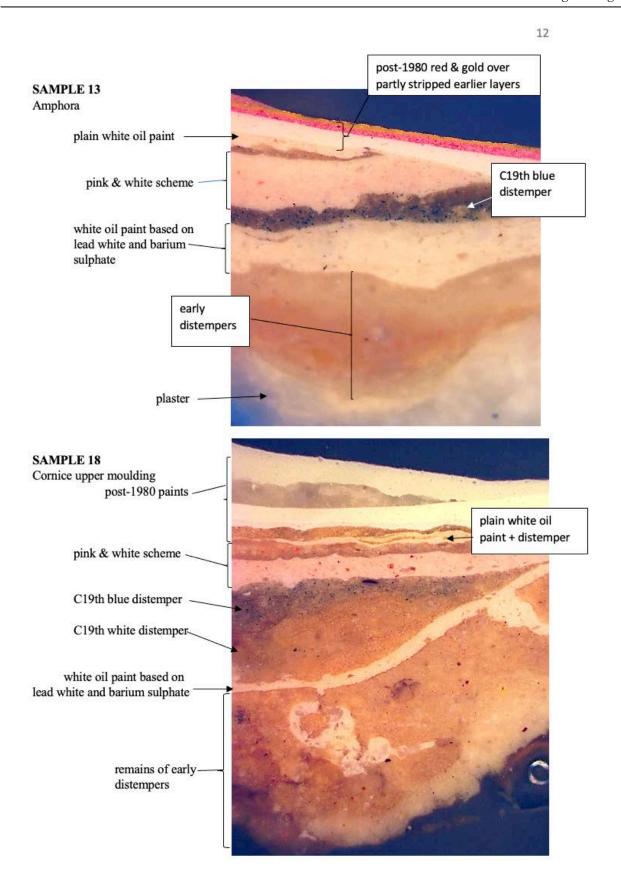








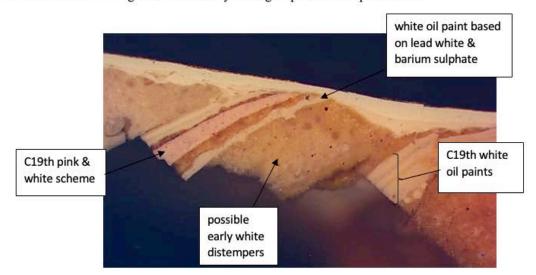




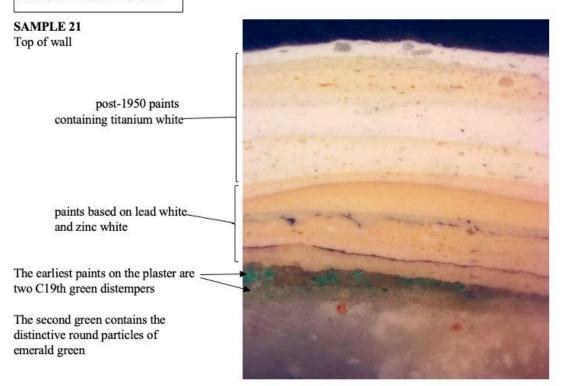
# SAMPLE 19

Cornice

The cross-section shows two loose fragments of C19th layers caught up in the 1980 paint scheme

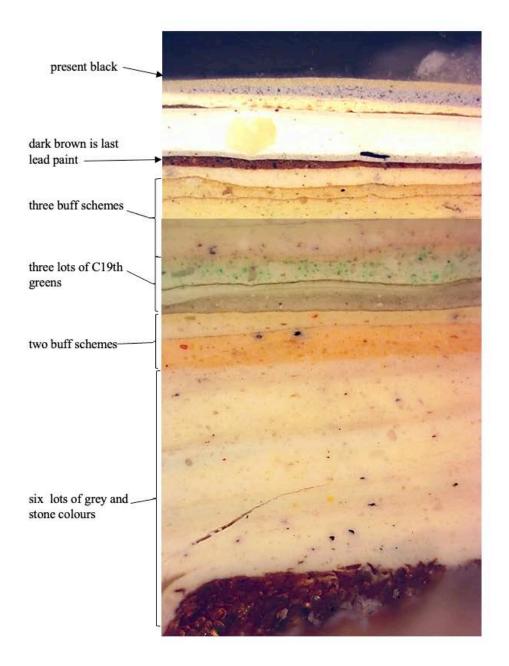


# RECEPTION ROOM

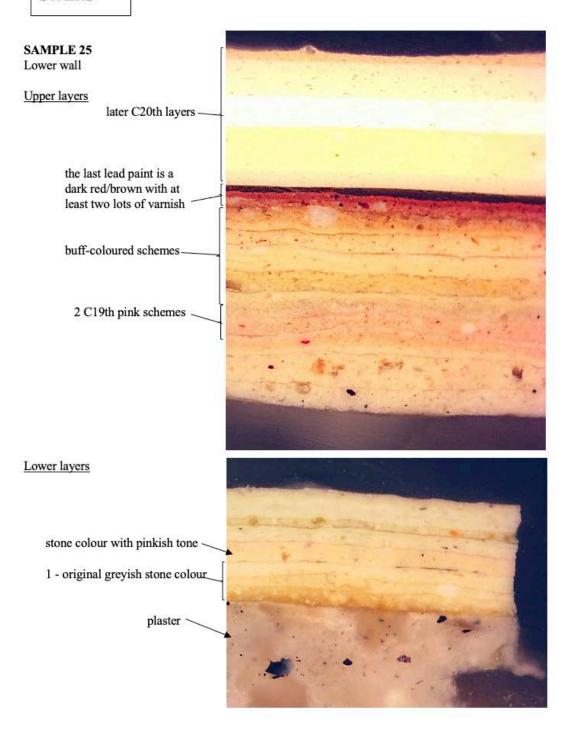


Sample 22 was exactly the same

SAMPLE 23
Fire surround
Showing fifteen lots of lead-based oil paint under the modern layers.

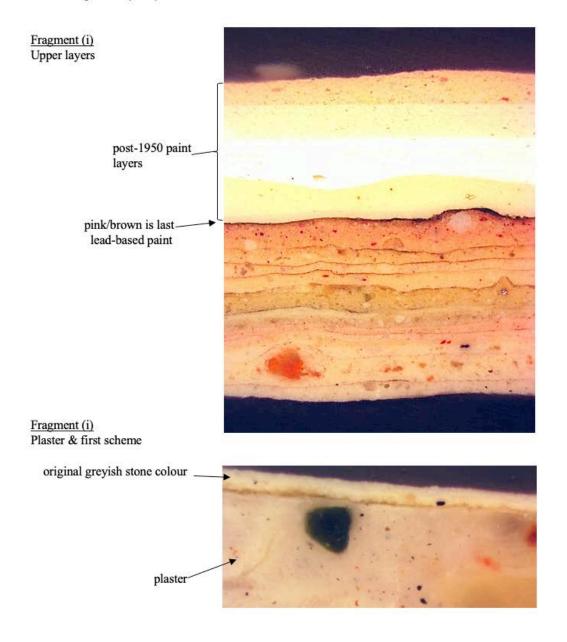


# **STAIRS**



# SAMPLE 26 Back of niche

Comparing this with Sample 25, from the lower part of the wall we can see that most of the layers are the same, but there is a pink/brown layer in place of the dark red/brown varnished scheme, and that red/brown paint may only have been used for the dado



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