

DOWN HOUSE, BROMLEY

Architectural Paint Research by Catherine Hassall

edited by

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Historical Analysis & Research Team
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Down House Bromley

Architectural paint research

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Contents

	Introduction	1
1	The exterior	2
1.1	The windows	2
1.2	The verandah	5
2	The interior, the ground floor	7
2.1	The entrance hall, staircase hall, and landing, Rooms G18, G11 and F3	7
2.2	The New Study, Room G16	16
2.3	The Drawing Room, room G5	19
2.4	The Old Study, Room G15	22
2.5	The Billiard Room, Room G14	28
2.6	The Dining Room, Room G2	31
2.7	The Kitchen, Room G1	33
3	The interior, the first floor	36
3.1	Dr Darwin's Study, Room F14	36
3.2	The Drawing Room extension bedroom, Room F5	40
3.3	The New Study extension bedrooms, Rooms F16 and 17	42
	Bibliography	44
	Appendices	45
1	Key dates in the development of the house relevant to the paint analysis	45
2	List of relevant visual sources	46

Introduction

This report is my own reworking of a draft text by Catherine Hassall submitted in June 1997. It incorporates dating evidence for the fabric of the house which was not available at that time. Consequently, it is more assertive in proposing an interpretative framework for the dating of paint schemes identified in the original report.

The results of the analysis are presented in tabular form supported by textual discussion. The 'nominal date' suggested for each phase in the tables is, of course, largely conjectural. However, some schemes, such as the earliest scheme in the New Study which we know was built in 1876, can be dated with more certainty. These nodal points are picked out in the tables in bold type. The dating of the schemes in between these nodal points is based on the assumption that the intervals between redecoration were approximately equal. This may appear simplistic but, if the nominal dates are accepted as the best possible approximation, without any contrary evidence, then at least the proposed dating framework is clearly stated. Although the notion of regular renewal of paint schemes is inherent in Catherine Hassall's report and is occasionally referred to, its application is not clearly set out in her draft text.

It must be emphasised that the content of this report is substantially the work of Catherine Hassall. The editing of the text required for the most part only correction of minor errors. The interpretation is largely in Catherine's report, the difference between the two reports is down to presentation and the introduction of new historical data and building analysis.

Appended to the report is a list of the key dates in the development of the house and a list of the relevant historical visual sources.

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1 The exterior

1.1 The windows

Samples were taken from all the ground floor and first floor windows at the back of the house and from the first floor windows at the front, on the eighteenth century block and the 1876 extension. Samples were taken from the frame and sash in each case. It appears the exterior joinery was repainted approximately every five years.

Photographs of the Darwin family in the garden, taken during the 1860s and 70s, show dark window sashes.

1858 Scheme 1 With the construction of the New Drawing Room, Room G5, the windows on the house are stripped and reprimed. At the same time, the house is rendered or lime-washed. Lead white priming and undercoat is used, followed by a cream colour on the frames and light brown on the sashes. There is definitely a colour difference between the two, but the contrast will not have been very marked. Splashes of render (or lime-wash), trapped between the first and second paint schemes, indicate that the walls were also redecorated at this time. The render is tinted with particles of black and ochre and will have been a light sandy colour.

The earliest paint scheme was found on Darwin's bedroom bay window, Room F2, so it must postdate the building of the bay in 1842. This early scheme predates the 1876 extension by four sets of paint layers, so it must belong sometime between those two dates. If repainting took place once every five years, this would suggest that the windows were thoroughly stripped down in the mid 1850s, perhaps in 1858 when the Drawing Room was built and new plate glass windows were installed in the Dining Room.

1865 to 1875 Schemes 2 to 4 Cream coloured frames and light brown sashes are similar to the first scheme, though the brown is now a warmer, darker colour and therefore the contrast between frames and sashes is greater.

1876 Scheme 5 With the building of the New Study, Room G16, the windows on the first floor of the 1876 extension provide a good marker. These windows have an extra set of brown and cream paint layers. Apparently it was not thought necessary to repaint the whole house when the extension was complete. Splashes of the bright green paint used to decorate the inside of the 1876 sashes were trapped between layers of the exterior paint, which helps confirm their status.

1876 to 1905 Schemes 6 to 11 The next six occasions that the windows are painted, the cream and brown combination is continued but now, the brown is quite dark.

1910 Scheme 12 In this scheme the window sashes are simply painted grey. This is just one coat of paint and it could be an undercoat and the finish coat was never applied. The same, single grey occurs in all the samples examined. There is dirt on this layer and it was obviously up for a considerable time. The frames were painted off-white.

1915 to 1920 Schemes 13 to 14 Two schemes in which the sashes are dark green over a grey undercoat. The frames are now off-white rather than cream and the contrast of tones will have been very marked. These dark greens must be the 'black' windows seen in some of the photographs.

1925 to 1975 Schemes 15 to 25 For the next fifty years the windows are painted a uniform, pure white. Presumably the change occurs with the change of ownership to the school. Zinc white appears to have been introduced about 1945 and titanium white about 1960.

Table 1.1.1 exterior paint, windows, schemes 1 to 6

Nominal date	1858	1865	1870	1875	1876	1880
Scheme	1	2	3	4	5	6
First floor window main block sash WIN/23	lead white undercoat and light brown	undercoat and brown	undercoat and brown	undercoat and brown		undercoat and dark brown
First floor window main block frame WIN/22	lead white undercoat and cream	cream	cream	cream		cream
New Study sash WIN/27					undercoat and brown	undercoat and dark brown
New Study frame WIN/?					cream	cream

Table 1.1.2 exterior paint, windows, schemes 7 to 12

Nominal date	1885	1890	1895	1900	1905	1910
Scheme	7	8	9	10	11	12
First floor window main block sash WIN/23	undercoat and dark brown	undercoat and dark brown	undercoat and dark brown	undercoat and dark brown	undercoat and dark brown	grey
First floor window main block frame WIN/22	cream	cream	cream	cream	cream	off-white
New Study sash WIN/27	undercoat and dark brown	undercoat and dark brown	undercoat and dark brown	undercoat and dark brown	undercoat and dark brown	grey
New Study frame WIN/?	cream	cream	cream	cream	cream	off-white

Table 1.1.3 exterior paint, windows, schemes 13 to 18

Nominal date	1915	1920	1925	1930	1935	1940
Scheme	13	14	15	16	17	18
First floor window main block sash WIN/23	grey undercoat and dark green	grey undercoat and dark green	pure white	pure white	pure white	pure white
First floor window main block frame WIN/22	off-white	off-white	pure white	pure white	pure white	pure white
New Study sash WIN/27	grey undercoat and dark green	grey undercoat and dark green	pure white	pure white	pure white	pure white
New Study frame WIN/?	off-white	off-white	pure white	pure white	pure white	pure white

Table 1.1.4 exterior paint, windows, schemes 19 to 25

Nominal date	1945	1950	1955	1960	1965	1970	1975
Scheme	19	20	21	22	23	24	25
First floor window main block sash WIN/23	zinc white	zinc white	zinc white	titanium white	titanium white	titanium white	titanium white
First floor window main block frame WIN/22	zinc white	zinc white	zinc white	titanium white	titanium white	titanium white	titanium white
New Study sash WIN/27	zinc white	zinc white	zinc white	titanium white	titanium white	titanium white	titanium white
New Study frame WIN/?	zinc white	zinc white	zinc white	titanium white	titanium white	titanium white	titanium white

1.2 The verandah

Throughout the last decade of the nineteenth century, the verandah was treated differently from the windows although it appears to have been painted approximately every five years.

1872, the construction of the verandah *Scheme 1* The wood was primed with a pink primer, similar to that used on the wooden parts of the greenhouse, and then painted a very pale green. The green is a mixture of Prussian blue, ochre, and an unidentified yellow (possibly lead chromate). At this stage, the windows of the house must have had brown sashes. The green is left on a long time, the section shows the layer to be blistered, cracked, and with a heavy coating of dirt.

1898 *Scheme 2* The green was replaced with a pale blue based on French ultramarine. A similar, if not identical, pale blue was used as the first colour for the greenhouse which was reroofed with fresh timber in 1898. It seems plausible that the same paint was used, especially as the original green on the verandah appears to have been in place for a number of years.

1905 to 1915 *Schemes 3 to 5* The blue was replaced with three (or more) cream schemes

1920 to 1975 *Schemes 6 to 7* The paint has flaked severely, and a number of more recent layers seem to be missing, but it seems that the verandah was painted at least twelve more times. Throughout the whole of this century, the verandah has always been painted pure white, probably with the same paint that was used for the windows.

Table 1.2.1 exterior paint, the verandah, schemes 1 to 6

Nominal date	1872	1898	1905	1910	1915	1920
Scheme	1	2	3	4	5	6
A verandah column DW/DR/7	pink primer and pale green	pale blue	cream	cream	cream	pure white

Table 1.2.2 exterior paint, the verandah, schemes 7 to 12

Nominal date	1925	1930	1935	1940	1945	1950
Scheme	7	8	9	10	11	12
A verandah column DW/DR/7	pure white	pure white	pure white	pure white	zinc white	zinc white

Table 1.2.3 exterior paint, the verandah, schemes 13 to 17

Date	1955	1960	1965	1970	1975
Scheme	13	14	15	16	17
A verandah column DW/DR/7	zinc white	titanium white?	titanium white	titanium white	titanium white

2 The interior, the ground floor

2.1 The entrance hall, staircase hall, and landing, Rooms G18, G11 and F3

The staircase hall and stairs, Room G11, were probably built in their present form about 1780 or 1800, reusing the mid-eighteenth century staircase originally located on the south side of the main block. When they were installed, the stairs had three flights and turned through 180 degrees so that they reached the landing over the middle of the hall. This arrangement has been restored in the recent programme of works to the house. The glazed double front door and fanlight, now located in the entrance hall, probably stood at the foot of the stairs in the north wall. The installation of the stairs also included a section of panelling closing off the area under the staircase against the west wall. By closing off the ground floor window in the hall, this panelling would have reduced the amount of light entering the room. It was lit by the first floor window in the west wall and probably by the fanlight above the front door.

Surviving eighteenth century paint on the door to the Old Study, Room G15, suggests that the woodwork was originally grained or painted dark brown, but towards the end of the century the colour was changed to a cream or stone colour.

In the early nineteenth century, the blue and white colour scheme, used to decorate the newly rearranged stairs, gave way to increasingly dark decorations. In the second quarter of the century, graining was introduced on the doors and bannisters, to accompany dark cream walls but in the subsequent two schemes the graining was over painted with the same dark cream used on the walls.

In 1843, Darwin built an extension along the north face of the house, creating a narrow, corridor-like entrance hall with a front door facing east.¹ The original front door appears in a photograph of Darwin on his horse Tommy, taken c 1868.² The new lay-out involved alterations to the north wall of the staircase hall at the foot of the stairs and the relocation of the earlier front door, fanlight and shutters to their present position in the entrance hall.

After the creation of the entrance hall c 1843, both the rooms were painted with green walls and grained woodwork. This continued to the end of the century. The graining darkened from imitation oak to mahogany, the greens became darker and at one point, towards the end of the Darwin family's occupation, there were two intensely sombre schemes involving heavily varnished mahogany graining and black skirtings. During the Darwins' occupation of the house, the hall was heated by a stove which was purchased and installed in 1845.³ The earlier front door was replaced with the present one, possibly as early as 1876. The view of the house by Parsons, shows that the porch had already reached its present height by 1882⁴.

The school painted the area completely white, Buckston Browne returned it to dark creams and browns. Since the war, there have been three decorative schemes, all light colours and ending with red 'Morris' wall paper and white woodwork. In 1962 the top flight of the stairs was altered and the closet room F18 was removed so that the landing was reached on the south side of the hall rather than in the middle.

The ceiling was not examined in the paint analysis. A great deal of paint stripping has been carried out on the woodwork in recent years, so the sequences have had to be jigsawed together and a

¹ Letter from Darwin to Susan Darwin, *Correspondence* Vol 2 pp 360-1. The publicity of the place is intolerable. Vinson from the effects of a £1 present & the hopes of another has been infinitely useful; he has laid out new approach, and is going to make me a plan and agreement for the passage to the new Hall Door. I suspect he is an old rogue, but he is a useful one.... I think the house will be a substantial one now, which was far from the case when these alterations commenced; as one of the bricklayers says to me with gloomy shake of the head "a most deceptive place to buy Sir."

² For the date of this photograph see Lea R, *Notes on the trellis...* December 1997

³ *Keystone Room Data Sheets* March 1998, Room G11

⁴ Published in the *Century Magazine*, 1883

number are incomplete. No information was obtained about the nineteenth and early twentieth century treatment of the stair treads or of the window/door to the garden. The analysis of the paint samples taken from the landing is presented in summary form in the accompanying table. The panelling on each side of the landing and the dado rail date from different periods and appear to have been rehung.

1740 to 1764 Schemes 1 to 4 The twisted balusters were reused from another location. They were found to have early brown paint layers identical to those on the Old Study door. These may have been a form of graining, as they involve a darker brown painted over a light orange brown. However, there is no varnish or glaze layer, and it could just have been a flat colour.⁽¹⁾ Similar paint layers were found in other parts of the house, on the Old Study door, on the panelling in the kitchen and on the kitchen door. The distinctive brown schemes are repeated four times.

1772 to 1788 Schemes 5 to 7 Towards the end of the eighteenth century, the dark brown is abandoned suddenly for off cream or stone colours.

1796 Scheme 8 The staircase was relocated from the south side of the house to the north-west corner. The associated refitting of the room included the plastering of the walls, fitting of new door architraves, skirtings dado rails⁽²⁾ and shutters and panelling under the stairs. A preparatory coat of lead white was applied to the new timber. There was no temporary distemper coat on the plaster. Oddly, the panelling under the stairs was treated differently, it was primed with red lead. The colour scheme was blue and white. The plaster walls, banisters, skirtings, and the areas of panelling were painted pale blue, the doors, door architraves, and shutters were painted white.

The blue is based on Prussian blue and is laid over a pale grey undercoat. The same undercoat, oil paint, and shade of blue is used for both plaster and wooden surfaces. The grey undercoat is missing from the panelling under the stairs, suggesting that the decision to install it was taken after the construction of the staircase was complete. This would explain the different primer. This is consistent with the plaster soffit of the stairs which appears to have been finished before the panelling was installed.

1804 to 1812 Schemes 9 to 10 Two blue and white schemes, very similar, if not identical, to the previous scheme, are applied, based on the same Prussian blue. The second blue contains some red ochre and the colour would have been more violet in hue.

1820 to 1836 Schemes 11 to 13 The next three schemes employ buff coloured paint and oak graining. In the first, scheme 11, the banisters, doors and shutters are grained and the panelling, walls and skirting are painted a flat buff colour. The graining technique is typical of nineteenth century practice, with a light undercoat, glazes and a final resin varnish. The effect will have been to imitate light oak. In the subsequent two schemes, 12 and 13, the wood graining is dropped and everything is painted with the flat buff colour. The panelling on the east wall of the landing was also painted flat buff.

1843 Scheme 14 The new entrance hall, Room G18, is built and given a temporary coat of distemper. The first proper decoration is a light green applied to the walls and oak graining to the joinery. The pigment involved is emerald green. All the wooden surfaces are now certainly grained. This decorative scheme is used throughout the entrance hall, the staircase hall and the stairs themselves. The sections of panelling on both sides of the landing, east and west, were painted light green. From now on, both areas are treated as a unit, painted the same colour, though there are two occasions when paint was used to touch up the entrance hall only. In 1845 Darwin purchased an Arnotts stove which was probably installed in the original hearth, with the original chimney piece intact.

1852 to 60 Schemes 15 to 16 The mid green and light oak graining is repeated in another two

schemes for the halls and the landing panelling. The graining used in Scheme 15 is recognisable under the microscope by a fluorescence of the glaze layer in ultra-violet light. It was also used in the Old Study, Room G15.

The evidence for some touching up work is supported by a letter from Emma to William, 2 March 1862, 'I am actually going to have the drawing room painted and papered. Papa thinks it a most unnecessary expense. I don't know how much of the hall & staircase must be done as the boys spoil the paint so much.'⁵

1868 Scheme 17 The tone of the decoration is now very dark. The walls are painted mid green with dark mahogany graining and black skirting fascias. The same areas as before are grained but there is a difference in the way in which the skirtings are treated. Previously the torus section of the skirting and the walls were painted the same green, now the torus is grained and the fascia painted black.

1876 Scheme 18 The original chimneypiece is probably removed and the present arched recess is created within the chimney breast. The previous colour scheme is repeated.⁽³⁾

1884 Scheme 19 A brighter green is used on the walls, the banisters and the skirting at the side of the stairs are painted white but the dark graining on the doors and panelling is retained, being simply given a fresh coat of varnish. The brighter green was also used on the panelling on both sides of the landing and as the first layer of paint on the dado rail. This suggests that this assemblage of panelling in this location probably dates from this period.

1892 Scheme 20 The first decoration to replace the dark nineteenth century colours, repeated the green on the walls but painted the woodwork white. The pigment in the white paint is still lead white which is appropriate for the early years of the twentieth century.

1900 to 1924 Schemes 21 to 24 All joinery elements are painted a uniform white. The white is based on zinc oxide. The walls are light blue or cream. The Down House School prospectus photographs show very light colours.

1929 to 1948 Schemes 25 to 27 The return to much darker colours is probably the work of Buckston Browne. This is consistent with his attempts elsewhere in the house to recreate the later nineteenth century paint schemes. The woodwork is painted a uniform dark red brown, presumably to simulate dark mahogany graining, and the walls, first a pale blue, then a cream and finally wall papered.

1956 to 1980 Schemes 28 to 31 The walls continue to be papered, although those of the Staircase Hall are painted once in a pinkish colour.⁽⁴⁾ The woodwork is first painted a dull green, the colour was visible in 1996 inside the shutter case, then twice white.

⁵

Table 2.1.1 staircase hall, entrance hall and landing, rooms G11, G18, F3, schemes 1 to 7

Nominal date	1740	1748	1756	1764	1772	1780	1788
Scheme	1	2	3	4	5	6	7
Stair balusters DW/SH/1.2		light orange brown with dark brown	light orange brown with dark brown	light orange brown with dark brown	cream or stone	cream or stone	cream or stone
Panelling below stairs DW/SH/3,8,46,51,52	light orange brown with dark brown	light orange brown with dark brown	light orange brown with dark brown	light orange brown with dark brown			
Panelling across the hall DW/SH/35/37							
Old Study door DW/SH/42							
Old Study door architrave DW/SH/52							
Glazed door shutters in entrance hall DW/SH/38							
Skirting fascia in staircase hall DW/SH/27/44							
North wall, above stairs DW/SH/7,22,39,40,41,50,54							
Entrance hall and alterations stair hall DW/FH/2,3,6 and DW/SH/37,53							
Inside chimney recess DW/SH/31/32							

Table 2.1.2 staircase hall, entrance hall and landing, rooms G11, G18, F3, schemes 8 to 14

Nominal date	1796	1804	1812	1820	1828	1836	1844
Scheme	8	9	10	11	12	13	14
Stair balusters DW/SH/1,2	pale grey u/c and blue	blue	violet blue	light oak graining	flat buff	flat buff	light oak graining
Panelling below stairs DW/SH/3,8,46,51,52	pale grey u/c and blue	blue	violet blue	flat buff	flat buff	flat buff	light oak graining
Panelling across the hall DW/SH/35/37	red lead u/c and blue	blue	violet blue	flat buff	flat buff	flat buff	light oak graining
Old Study door DW/SH/42	white lead u/c and white	white	white	light oak graining	flat buff	flat buff	light oak graining
Old Study door architrave DW/SH/52	white lead u/c and white	white	white	light oak graining	flat buff	flat buff	light oak graining
Glazed door shutters in entrance hall DW/SH/38	white lead u/c and white	white	white	light oak graining			
Skirting fascia in staircase hall DW/SH/27/44	pale grey u/c and blue	blue	violet blue	flat buff	flat buff	flat buff	light oak graining
North wall, above stairs DW/SH/7,22,39,40,41,50,54	pale grey u/c and blue	blue	violet blue	flat buff	flat buff	flat buff	light green
Entrance hall and alterations to stair hall DW/FH/2,3,6 and DW/SH/37,53							light green
Inside chimney recess DW/SH/31/32							

Table 2.1.3 staircase hall, entrance hall and landing, rooms G11, G18, F3, schemes 15 to 21

Nominal date	1852	1860	1868	1876	1884	1892	1900
Scheme	15	16	17	18	19	20	21
Stair balusters DW/SH/1,2	light oak graining	light oak graining	mahogany graining	mahogany graining		white	zinc white
Paneling below stairs DW/SH/3,8,46,51,52	light oak graining	light oak graining	mahogany graining	mahogany graining	varnish	white	zinc white
Paneling across the hall DW/SH/35/37	light oak graining	light oak graining	mahogany graining	mahogany graining	varnish	white	zinc white
Old Study door DW/SH/42	light oak graining	light oak graining	mahogany graining	mahogany graining	varnish	white	zinc white
Old Study door architrave DW/SH/52	light oak graining	light oak graining	mahogany graining	mahogany graining	varnish	white	zinc white
Glazed door shutters in entrance hall DW/SH/38	light oak graining	light oak graining	mahogany graining	mahogany graining			
Skirting fascia in staircase hall DW/SH/27/44	light oak graining	light oak graining	mahogany graining and black	mahogany graining and black		white	zinc white
North wall, above stairs DW/SH/7,22,39,40,41,50,54	light green	light green	mid green	mid green	green	green	light blue
Entrance hall and alterations to stair hall DW/FH/2,3,6 and DW/SH/37,53	light green	light green	mid green	mid green	green	green	light blue
Inside chimney recess DW/SH/31/32			mid green	mid green	green	green	light blue

Table 2.1.4 staircase hall, entrance hall and landing, rooms G11, G18, F3, schemes 22 to 28

Nominal date	1908	1916	1924	1929	1940	1948	1956
Scheme	22	23	24	25	26	27	28
Stair balusters DW/SH/1,2	zinc white	zinc white	zinc white	dark red brown	dark red brown	dark red brown	dull green
Panelling below stairs DW/SH/3,8,46,51,52	zinc white	zinc white	zinc white	dark red brown	dark red brown	dark red brown	dull green
Panelling across the hall DW/SH/35/37	zinc white	zinc white	zinc white	dark red brown	dark red brown	dark red brown	dull green
Old Study door DW/SH/42	zinc white	zinc white	zinc white	dark red brown	dark red brown	dark red brown	dull green
Old Study door architrave DW/SH/52	zinc white	zinc white	zinc white	dark red brown	dark red brown	dark red brown	dull green
Glazed door shutters in entrance hall DW/SH/38		zinc white	zinc white		dark red brown	dark red brown	dull green
Skirting fascia in staircase hall DW/SH/27/44			zinc white	dark red brown	dark red brown	dark red brown	
North wall, above stairs DW/SH/7,22,39,40,41,50,54	cream	light blue	cream	white?	paper	white?	white?
Entrance hall and alterations to stair hall DW/FH/2,3,6 and DW/SH/37,53	cream	light blue	cream	white?	paper		
Inside chimney recess DW/SH/31/32	cream	light blue	cream	white?	paper		

Table 2.1.5 staircase hall, entrance hall and landing, rooms G11, G18, F3, schemes 29 to 31

Nominal date	1964	1972	1980
Scheme	29	30	31
Stair balusters DW/SH/1,2	zinc white	zinc white	zinc white
Panelling below stairs DW/SH/3,8,46,51,52	zinc white	zinc white	zinc white
Panelling across the hall DW/SH/35/37	zinc white	zinc white	zinc white
Old Study door DW/SH/42	zinc white	zinc white	zinc white
Old Study door architrave DW/SH/52	zinc white	zinc white	zinc white
Glazed door shutters in entrance hall DW/SH/38			
Skirting fascia in staircase hall DW/SH/27/44	zinc white	zinc white	zinc white
North wall, above stairs DW/SH/7,22,39,40,41,50,54	paper		
Entrance hall and alterations to stair hall DW/FH/2,3,6 and DW/SH/37,53			
Inside chimney recess DW/SH/31/32			

Table 2.1.6 the landing, room F3

Note , the analysis of this room is presented in summary in Catherine Hassal's draft report. The following table shows the suggested correspondence between the schemes applied to the panelling and dado and those on the north wall of the staircase hall.

Nominal date	1796 to 1812	1820 to 1836	1844 to 1876	1884 to 1892
Scheme	8 to 10	11 to 13	14 to 18	19 to 20
North wall above stairs DW/SH/7,22,39,40,41,50,54	pale blue	flat buff	light green	green
Panelling A, on east side of landing		flat buff	light green	green
Panelling B, on west side of landing			light green	green
Dado rail				green

2.2 The New Study, Room G16

This room is part of the extension built in 1876. It was initially intended for use as a Billiard Room but by 1882 it was used as a study by Darwin. It is not clear from the documentation whether it ever was used as a billiard room, although during its construction Frank moved into the old billiard room, Room G14, and used it as a sitting room.

1876 Scheme 1 Following the construction of the room, the plaster walls, cornice and ceiling were given a temporary coat of very pale blue distemper. The doors, chair rail, skirting and ceiling beam were primed with a lead white/red lead preparation and then given a coat of pale blue oil paint. Only late twentieth century paint was found on the windows and window seats, but presumably these originally matched the rest of the woodwork. In the wall papered bedrooms above, rooms F16 and 17, built at the same time, the windows and skirtings are painted the same green.

The first full decorative scheme involved wall paper on all the walls, even inside the alcove arches, pale blue green oil paint on the door and the chair rail, the skirting, the picture rail and the beading around the arch, blued white, soft distemper on the ceiling and blued white oil paint on the cornice and the beam. No wall paper was found in the paint sampling, but absence of wall paint layers equivalent to those found on the woodwork, mean that it was used. Traces of wall paper glue and lining paper seen in the cross-sections provide supporting evidence. The earliest wall paper found in the room is a design by George Sherrin, a willow pattern registered in 1880 (PRO Reference BT 43/103 no 35229).⁶

The addition of a small amount of French ultramarine blue to the distempers and oils used for the ceiling and cornice was probably only enough to make the white appear brighter, not to give it any real colour. The pale blue green oil paint used on the joinery is a mixture of lead white, Prussian blue, chrome yellow, an iron oxide brown and a little fine-particle carbon black. The sections show that it was laid on in three identical applications, without the traditional grey undercoat. The pale blue of the temporary coat must have been considered appropriate as a base.

1879 Scheme 2 This scheme may mark the change in use from Billiard room to Study. The first redecoration is quite different, the woodwork is no longer painted green but a deep cream colour and this colour is repeated the next two times the room is painted. The ceiling and cornice continue white, but there is a change in the type of paint. The beam is still painted in oil paint, but a soft distemper is now used on the cornice, as on the soffit.

1895 to 1900 Schemes 3, 4 There were two further occasions when the room was decorated using wall paper. Each time the woodwork was painted a cream colour and the ceiling and cornice were painted white. The second wall paper, a William Morris willow design,⁷ found in the room may date from either of these schemes.

1910 to 1920 Schemes 5, 6 The two paint schemes which follow the removal of the bookcase next to the door to the garden, must belong to the early decades of the twentieth century. The first scheme, 5, is the last lead based paint scheme and it marks another change, wall paper is no longer used, instead the plaster walls are now painted a dark green and all the woodwork, the cornice and the ceiling are white. These presumably are the colours chosen by the school. The second scheme, 6, uses an identical green on the walls but the white paint used for the woodwork is now based on zinc oxide.

1930 Scheme 7 The next redecoration is still based on zinc oxide and therefore likely to predate the war. This could be the work of Buckston Brown. The walls continue to be painted green, although in a slightly lighter shade, the woodwork is picked out in pale blue and the cornice and

⁶ J Bryant *Darwin at Down* September 1997, p13

⁷ J Bryant *Darwin at Down* September 1997, p13

ceiling are white.

It looks as though Buckston Browne carried out some paint scraping, exposed the 1876 pale blue/green and attempted to match it. The colour is quite similar and it marks a reversal to the coloured woodwork of the nineteenth century.

1935 to 1970 *Schemes 8 to 10* Three more paint schemes complete the sequence. The first is based on a zinc white (pre 1950s) and the last two on titanium white (1950s and later).

Scheme 8 Yellow walls, white cornice and ceiling, woodwork picked out in pale green

Scheme 9 Dark cream walls, white cornice and ceiling, woodwork picked out in dark green. This was still visible in 1996 behind the display boards installed in 1965.

Scheme 10 The display on Evolution. Painted lining paper on the walls above the display boards white painted cornice and ceiling. In 1965 The Royal College of Surgeons approved the redecorating of the New Study as an exhibition room. The display was to include a mural on Evolution and 'suitable models.'⁸

* RCS Minutes 1965-7 pp. 59 and 88

Table 2.2.1 the New Study, room G16, schemes 1 to 5

Nominal date	1876	1880	1890	1900	1910
Scheme	1	2	3	4	5
Door, chair rail and skirting DW/NS/9,10,11,16	lead white/red lead, and pale blue u/c and pale blue green oil paint	deep cream oil paint	cream	cream	white
Edge of arch and picture rail DW/NS/3, 5	very pale blue distemper u/c and pale blue green oil paint	deep cream oil paint	cream	cream	white
Main wall DW/NS/1,2,4,12,14,15	very pale blue distemper u/c and wall paper	wall paper?	wall paper?	wall paper?	dark green
Cornice DW/NS/6a,6b,13	blued white distemper u/c and blued white oil paint	soft white distemper		white	white
Ceiling beam DW/NS/7,8	lead white/red lead, and pale blue u/c and blued white oil paint	white oil paint	white distemper	white	
Windows DW/NS/17					

Table 2.2.2 the New Study, room G16, schemes 6 to 10

Nominal date	1920	1930	1940	1950	1965
Scheme	6	7	8	9	10
Door, chair rail and skirting DW/NS/9,10,11,16	zinc white	zinc white	pale green	dark green	
Edge of arch and picture rail DW/NS/3, 5	zinc white	zinc white	pale green	dark green	
Main wall DW/NS/1,2,4,12,14,15	dark green	green	yellow	dark cream	lining paper and white
Cornice DW/NS/6a,6b,13	white	white	zinc white	titanium white	titanium white
Ceiling beam DW/NS/7,8			zinc white	titanium white	titanium white
Windows DW/NS/17			zinc white	titanium white	titanium white

2.3 The Drawing Room, room G5

The Drawing Room was built onto the north-west corner of the central block in between September 1857 and March 1858. The interior of the drawing was photographed in 1876.⁹

The plaster cornice was replaced in 1966 but a section of the original was preserved for analysis. The doors, architraves, windows and shutters have all been recently and very thoroughly stripped. The room now has very little old paint left in it. Most of the skirting has been replaced and where it survives it has been stripped. Wall paper was used throughout much of the room's history, so only early and late paint survives on the walls.

March 1858 *Scheme 1* The preparatory work includes two coats of white, soft distemper on the walls, both presumably temporary coats. The woodwork was primed with lead white paint.

Surprisingly, the first paint on the frieze and cornice is not a distemper. Most of the twenty samples taken show a layer of pure lead white oil paint resting directly on the white gypsum plaster. The distemper layers follow this oil paint. The only samples without this lead layer were taken from the run of straight moulding which is executed in a pinkish plaster. The explanation must be that the runs of cast moulding were bought already painted with lead white. They were then set into the wall and the pink plaster used to give them a border.

The first finished scheme seems to be a pale blue oil paint on the walls, white distemper on the frieze and cornice and light oak graining on the woodwork. The sample from the edge of the door architrave shows classic nineteenth century graining layers.

That the blue oil paint predates the application of wall papers is suggested by

- 1, the oil paint is lead based
- 2, it rests cleanly on distemper that has been partially washed down
- 3, there is no trace of wall paper glue⁽⁵⁾

July 1858 *Scheme 2* Nothing was found of the second and subsequent woodwork paint layers, except a trace of buff coloured paint on the surface of the first graining. However, it is fairly safe to guess that this could be the undercoat of a second graining, as the Staircase Hall, Old Study and Dining Room were all grained repeatedly at this period.

Traces of glue in the wall cross-sections is all that is left of the wall paper. Part of the later layer sequence in the wall samples is a set of three lead based paints, which indicates that the wall paper continued to be used until the end of the century.

The frieze is decorated with mauve distemper and gilded. The mauve colour is made from a mixture of French ultramarine, a tiny bit of vermilion and some red lake. The red lake has largely faded but a few particles were seen in section. The use of two reds and the inclusion of fugitive organic lake pigment, is remarkable in a distemper medium. It suggests that very specific colours were stipulated, and had to be mixed on the spot. Finding gold associated with distemper is also surprising, in that distemper is a fragile and impermanent paint. The gilding is oil gilding over a yellow base.

The date of this second scheme, following so soon after the completion of the room about March of the same year, is given in the family's correspondence. Witness, the letter from Charles Darwin to William, on 7 July 1858, 'Mamma went up yesterday & brought down two such patterns, of the exact colour of mud, streaked with rancid oil, that we all exclaimed against them; & I have agreed to take anything in preference & we have settled on a crimson flock-paper with golden stars, though

⁹ See list of relevant visual sources appended to this report

unseen by me.¹⁰ And the letter from Henrietta Darwin to Euphemia Wedgwood, not dated, first page missing but presumably about the same time, 'I think our drawing room will be so pretty when done. I am much pleased with the cornice tinted in mauve and gold but I found it didn't do to trust Joseph Barratt's taste, great though he be.'¹¹

1862 Scheme 3 The frieze is decorated with deep green and gold. Nothing is known of the joinery or the wall paper. The green on the frieze is again a distemper, using French ultramarine, carbon black and yellow ochre. Fresh oil gilding is applied. This is probably the scheme subsequent to the letter, dated 2nd March 1862, in which Emma wrote to William, 'I am actually going to have the drawing room painted and papered'

1870 Scheme 4 The green and gold on the cornice is repeated, possibly reusing the same gold as in the previous scheme.⁽⁶⁾ It is probably this scheme which appears in the two photographs of the room and printed by England, probably taken in 1876.¹² The photographs show a dark colour on the cornice and is therefore not the cream of the following scheme.

1880 Scheme 5 The cornice is painted cream and gold. The cream is a lead based oil paint and the gold is again oil gilding. The gilded elements are the same ones that were gilded originally. This was probably designed to go with the wall paper mentioned in a letter from Emma to Henrietta, 4th April 1880, 'There is one lily paper I like much better than any - a dull green, but I am a little afraid of the colour because of the rest of the furniture - We laughed the matting dado to scorn & of the cloth ones I have marked the suitable ones for the yellow paper & for the lily; & one of those we will have: but I feel as if they (the dados) were something too odd.'¹³ Later in a letter to Henrietta? in April 1880, Emma writes, 'When I came home I was perfectly dazzled w. passage & quite approve of the d. room as the paper requires v. few pictures - I find we have a good store of paper over for accidents.'¹⁴ Creams were used in the New Study about this time, see scheme 2.

1890 Scheme 6 The wall paper is abandoned in favour of a pale blue oil paint, using the pigment French ultramarine. The frieze and cornice are painted in plain white oil paint which now completely obliterates the gilding.

1900 to 1910 Schemes 7 and 8 Two off white oil paint layers applied to the walls and white distemper applied to the frieze and cornice.

1920 Scheme 9 The walls are covered with lining paper and painted with white, zinc oxide based paint which is what one would expect to find in the period between 1920 to 50.

1930 Scheme 10 A sandy yellow colour on the walls may also predate the war.

1940 Scheme 11 The woodwork is stripped and then primed with red lead before being given a white undercoat and a titanium based bright green finish coat.

1950 Scheme 12 The joinery is painted dark blue.⁽⁷⁾⁽⁸⁾

1966 Scheme 13 The walls are papered with a Regency stripe paper and the joinery is painted with a titanium based white. At a quarterly meeting of the Royal College of Surgeons, 13 October 1966, expenditure of £2000 was approved for structural repairs and the redecoration of the drawing room.¹⁵

¹⁰ *Correspondence*, Vol 7, p 318

¹¹ The Wedgwood/Mosely Collection, W/M 437, see Keystone's Historic Room Data Sheets for discussion of date of this letter

¹² See list of relevant visual sources appended to this report

¹³ CUL DAR 219.9:229

¹⁴ CUL DAR 219.9:232

¹⁵ RCS Minutes, 1965-67 p.307

Table 2.3.1 the Drawing Room, Room G5, schemes 1 to 5

Nominal date	1858 March	1858 July	1862	1870	1880
Scheme	1	2	3	4	5
The walls DW/SR/1,4	two coats of white soft distemper undercoat and pale blue oil paint	wall paper	wall paper?	wall paper?	wall paper?
Joinery DW/SR/2a,b	lead white paint primer, and light oak graining	oak graining?	(stripped)	(stripped)	(stripped)
Cornice and frieze DW/SR/A20-3, B1-8, C9-11, D12-19	pure lead white oil primer and white distemper	mauve distemper and oil gilding	deep green distemper and oil gilding	deep green distemper and oil gilding	cream lead based oil paint and oil gilding

Table 2.3.2 the Drawing Room, Room G5, schemes 6 to 10

Nominal date	1890	1900	1910	1920	1930
Scheme	6	7	8	9	10
The walls DW/SR/1,4	Pale blue oil paint	off white oil paint	off white oil paint	lining paper and white zinc oxide paint	Sandy yellow
Joinery DW/SR/2a,b	(stripped)	(stripped)	(stripped)	(stripped)	(stripped)
Cornice and frieze DW/SR/A20-3, B1-8, C9-11, D12-19	plain white oil paint	white distemper	white distemper		

Table 2.3.2 the Drawing Room, Room G5, schemes 11 to 13

Nominal date	1940	1950	1966
Scheme	11	12	13
The walls DW/SR/1,4	wall paper		Regency stripe wall paper
Joinery DW/SR/2a,b	stripping, red lead primer, white u/c, bright green (titanium)	dark blue	white
Cornice and frieze DW/SR/A20-3, B1-8, C9-11, D12-19		removed and replaced	

2.4 The Old Study, Room G15

The Old Study is an assemblage of original, reused and reproduction elements. The analysis of its development is therefore complicated and the evidence can be interpreted in different ways. The following is based on the accumulation of paint layers on the door to the study and door reveal which is then related to sequences recovered from elsewhere in the room. The panelling on the south wall has only two points of contact with this sequence and is therefore considered separately at the end of this section on the Old Study. The room was photographed in 1876.¹⁶

The paint on the cornice does not go back earlier than about the second quarter of the nineteenth century. However, because the first layer is a soft distemper, it is possible that a previous sequence has been lost or washed off.

The door and the cupboards around the door were stripped, probably in the early part of this century since lead paint was still being used. Unlike the door, the cupboards retain no trace of any eighteenth century paint. All that was found were the highly coloured paint layers corresponding to the second half of the nineteenth century.

The door architrave has also been stripped. It appears to be more recent than the cupboard since none of the coloured layers were found on it, though traces of lead based paint do survive.

The window sill has also been stripped. However, traces of an iron oxide primer and some lead white paint mean that it certainly dates from the nineteenth century and could be earlier.⁽⁹⁾

The windows and shutters have also recently been stripped. The earliest paint layers are a couple of lead white schemes and a lead white primer. However, parts of the shutter bar survived the paint removal. It reveals a clear paint sequence going back to the second quarter of the nineteenth century, before the room was grained for the first time.

The cyma moulded panelling between the two windows on the east wall dates from the second half of the nineteenth century, corresponding to the second occasion that the Old Study is grained.

The hat rack has nineteenth paint on it but the sequence is not connected to any other in the room and has probably been brought in from elsewhere. It is not possible to determine when it was first installed.

1770 to 1800 Schemes 1 to 4 The door and door reveal were painted four times with a light orange brown overlain with dark brown, possibly to simulate wood graining but without a glaze. This is identical to the sequence of paint found on the stair balusters and the panelling below the stairs. It is possible that the door was not in its present location when these schemes were applied. However, there is no evidence to suggest that it was not.

1810 Scheme 5 The door and door reveal is painted white.

1820 Scheme 6 The door and door reveal is painted white again. The plaster cornice is installed and painted with a soft white distemper. The window shutters are also installed. Although the paint does not survive on the joinery, it did survive on the metal closing bar. The plaster cornice suggests that, at this stage, the room was plastered rather than panelled.

1830 Scheme 7 The whites of the previous scheme are repeated although oil paint is used on the cornice instead of distemper.

1840 Scheme 8 The cornice is painted again with an oil based white but the joinery, the door, door

¹⁶ See list of relevant visual sources appended to this report

reveal, and window shutters are covered with a glazed light oak graining. The plaster⁽¹⁰⁾ wall above the windows and below the cornice is also grained.

1848 Scheme 9 The east wall of the room is lined with panelling and everything, including the cornice and the wall face above the windows, is covered with light oak graining. This particular graining layer, identifiable by the fluorescence of the glaze layer, was also used on the stairs, see Staircase Hall, Room 11, Scheme 15. The panelling on the east wall was subsequently cut away to expose the plaster wall face although the panelling stiles remain *in-situ* against the window shutter boxes. The peg holes for the joint with the dado rail are still visible. Where the stiles would have been left un moulded for the return with the dado rail, the cyma has been crudely made good.

1856 Scheme 10 The cornice is given a coat of white distemper, the door, door reveal, window shutters and panelling on the east wall, a lead white/red lead, and pale blue.

1864 Scheme 11 The cornice is painted with white oil paint and the joinery is painted dark green. At this date the cupboards around the door are installed.

1872 Scheme 12 The cornice is painted with white distemper and the joinery is painted dark blue. The room was photographed in 1876.¹⁷

1880 Scheme 13 The cornice is painted pale pink and the joinery is mahogany grained. The graining corresponds with that used in the staircase hall, see schemes 17 and 18.

1890 to 1920 Schemes 14 to 17 Four schemes in which the door, door reveal and cupboards around the door are painted white. The cornice is painted with white distemper three times and the window joinery and panelling on the east wall painted twice, white.

1930 Scheme 18 The door, door reveal and window joinery, but not the cupboards around the door or the panelling on the east wall, are painted with a zinc oxide based white.

1940 Scheme 19 A new dado rail is installed on the south wall. The large bookcase is reconstructed on the basis of the 1876 photograph without the later glass fronted doors. All of the joinery in the room is now given a coat of light oak graining. The cupboard and shelves in the north east corner of the room were reconstructed on the basis of the photograph of the Old Study, taken in 1876 and given one layer of graining. A photograph of the newly restored Old Study was sold as a post card by the museum.

1950 Scheme 20 Glass fronted doors are added to the bookcase on the south wall and given a coat of light oak graining based on titanium oxide.

The panelling on the south wall

The following is a discussion of the paint sequences on the panelling on the south wall and the date of its introduction into the room.

The plaster cornice and wall surfaces in the room appear to date from about 1820, see scheme 6 above. The east wall is lined with cyma moulded panelling, probably about 1848, see scheme 9 above.

The south wall is lined with two sections of reused ovolo moulded panelling, probably taken from another room within the house. Like the panelling on the east wall, the top of the panelling projects too far in front of the lower part of the cornice. This suggests that the south wall retains its plaster,

¹⁷

See list of visual sources appended to this report

wall finish, probably plaster on lath, behind the panelling.

Despite the similarity in their appearance, the two sections of panelling, A and B, appear to be of different ages. The panelling on the south wall next to the door, A, is the older by seven coats of white paint, see schemes 1 to 7, whereas the panelling behind the bookcase on the same wall, panelling B, has none of these layers. However, they do both have three distinctive paint layers in common.

The first of the layers in common, scheme 8, is a white paint with a blue verditer pigment. This coat was applied after seven coats of white paint to panelling A but as the first coat to panelling B. The same colour was also found on the window joinery in the adjacent room, Room G14.

The second layer in common, is the light oak graining, recognisable by its fluorescence under ultraviolet light, scheme 9, found on joinery in the Old Study and in the staircase hall. This is the first scheme on both sections of panelling in common with other joinery in the Old Study. This suggests that the panelling was introduced into the room at this date.

However, from here on, not only does the subsequent paint history of the panelling show a divergence from the rest of the room but the two sections of panelling are also treated differently. Panelling A has four coats of a dark cream paint, Schemes 10 to 13, before a second coat of light oak graining, Scheme 19, whereas panelling B remains unpainted between the first and second grainings, Schemes 9 and 19.

The difference between the two sections of panelling is probably explained by the construction of a bookcase against the south wall. It appears in the photograph of Darwin's Old Study, taken in 1876. It would have concealed the eastern section of the wall, panelling B. However, it is not clear why the panelled south wall was painted dark cream in this sequence, when the joinery elsewhere in the room was painted pale blue, dark green, dark blue and then mahogany grained. Perhaps it was designed to relate to wall paper finishes and not to the joinery.

The subsequent schemes, 14 to 18, are not represented in either of the samples taken from the south wall panelling. The most likely explanation for this probably lies in the removal of the bookcase and the original dado moulding and the subsequent covering of the panelling with paper on Hessian backing. This wall finish, which survives on panelling on the second floor of the house in rooms S11 and 12, leaves no trace on the panelling other than a pattern nail holes where the Hessian is attached.

The reconstruction of the bookcase and replacement dado rail presumably followed the removal of the Hessian backed papering of the south wall. The light oak graining, Scheme 19, applied to the reconstructed bookcase was also applied to the panelling on the south wall.

Table 2.4.1 The Old Study, Room 15, schemes 1 to 7

Nominal date	1770	1780	1790	1800	1810	1820	1830
Scheme	1	2	3	4	5	6	7
Cornice DW/OS/22						soft white distemper	white
Door and door reveal DW/OS/7a b, d, F ⁽¹⁾	light orange brown with dark brown	light orange brown with dark brown	light orange brown with dark brown	light orange brown with dark brown	white	white	white
Iron shutter bar DW/OS/11							
Cyma moulding DW/OS/19a							
Cupboards around door DW/OS/9c							
Panelling A on south wall DW/OS/4,5,30		white	white	white	white	white	white
Panelling B on south wall, behind bookcase DW/OS/1							
Dado rail, cupboards and bookshelves DW/OS/15,16							
glass fronted doors of bookcase DW/OS/?							

Table 2.4.2 The Old Study, Room 15, schemes 6 to 10

Nominal date	1840	1848	1856	1864	1872	1880	1890
Scheme	8	9	10	11	12	13	14
Cornice DW/OS/22	white	light oak graining	white distemper	white	white distemper	pale pink	white distemper
Door and door reveal DW/OS/7a b, d, F ⁽¹²⁾	light oak graining	light oak graining	lead white/red lead, and pale blue u/c	dark green French ultramarine	dark blue	mahogany graining	white
Iron shutter bar DW/OS/11	light oak graining	light oak graining	lead white/red lead, and pale blue u/c	dark green French ultramarine	dark blue	mahogany graining	
Cyma moulding DW/OS/19a		light oak graining	lead white/red lead, and pale blue u/c	dark green French ultramarine	dark blue	mahogany graining	
Cupboards around door DW/OS/9c				dark green French ultramarine	dark blue	mahogany graining	white
Panelling A on south wall DW/OS/4,5,30	verditer blued white	light oak graining					dark cream
Panelling B on south wall, behind bookcase DW/OS/1	verditer blued white	light oak graining					
Dado rail, cupboards and bookshelves DW/OS/15,16							
Glass fronted doors of bookcase DW/OS/? ⁽¹³⁾							

Table 2.4.3 The Old Study, Room 15, schemes 15 to 20

Nominal date	1900	1910	1920	1930	1940	1950
Scheme	15	16	17	18	19	
Cornice DW/OS/22	white distemper	white distemper				
Door and door reveal DW/OS/7a b, d, F ⁽¹⁴⁾	white	white	white	zinc white	light oak graining	
Iron shutter bar DW/OS/11		white	white	zinc white	light oak graining	
Cyma moulding DW/OS/19a		white	white		light oak graining	
Cupboards around door DW/OS/9c	white	white	white		light oak graining	
Panelling A on south wall DW/OS/4,5,30	dark cream	dark cream	dark cream		light oak graining	
Panelling B on south wall, behind bookcase DW/OS/1					light oak graining	
Dado rail, cupboards and bookshelves DW/OS/15,16					light oak graining	
Glass fronted doors of bookcase DW/OS/? ⁽¹⁵⁾						titanium dioxide based light oak graining

2.5 The Billiard Room, Room G14

The room is in the main eighteenth century five bay fronted block. It was used as a dining room when the Darwin family first moved in, but was converted to a billiard room in 1859. In 1876 it became Francis Darwin's sitting room but in 1882, the inventory refers to it as 'Mrs Darwin's Sitting Room on N Blue Paint.'

The late eighteenth century dado panelling has been stripped of all paint except in the window recesses, behind the radiators, where one can see a mid-green paint. The door and the windows have also been stripped

The room has been wall papered above the dado panelling consistently since the eighteenth century. There are no traces of paint recovered in the samples taken. Until the mid-nineteenth century, the wall paper is accompanied by a white dado. A dark, buff coloured scheme which replaces the white, is very similar to a colour used on the panelling of the stairs and landing just before the Darwin family moved in, in 1842, see Staircase Hall, schemes 12 and 13.

The brown was replaced with emerald green probably about 1845 when the Staircase Hall walls were painted this colour. In general, this room was repainted by the Darwins far less often than the Stairs and Hall, just three times as opposed to seven. The second colour is again emerald green and the third is the pale blue referred to in the inventory of 1882. Thereafter, the panelling is consistently white until the middle of this century when it is given a dark, heavily varnished mahogany graining, probably by Buckston Browne who does something similar on the Stairs. The mid-green that survives under the windows is a post-war paint.

The cornice has always been painted white. Eleven layers of paint were found, alternating oils and distempers. On the assumption that redecoration occurred at approximately ten year intervals, eleven schemes on the cornice suggests a mid-nineteenth century date but, since many of the schemes are fragile distempers, whole sections could have been lost.

1805 to 1825 Schemes 1 to 3 The wood is primed with lead white, and this is followed by three white layers. So few paint schemes must mean that the panelling was put in very late in the eighteenth century. The white of the first scheme contains occasional particles of blue verditer. There is not enough verditer to give a blue colour, but enough to brighten the white. It may be significant that the same pigment is used as the first coat on some of the panelling in the Old Study, Room G15, see scheme 8.⁽¹⁶⁾

1835 Scheme 4 A dark buff colour, similar if not identical to a pair schemes used at this time on the joinery in the Staircase Hall, schemes 12 and 13, and on the panelling on the Landing. This must have been the colour the Darwins found when they first rented the house and used it as the Dining Room.¹⁸

1845 to 1860 Schemes 5 and 6 Two green schemes, both based on the pigment emerald green, correspond with the schemes used on the walls in the Stairs and in the Hall after the new Entrance Hall was built in 1843, see schemes 14 to 16. The room remained the Dining Room until the construction of the Drawing Room, Room G5, in 1858, when the former drawing room, Room G2, with the bay became the Dining Room. It was in 1859 that the room became the Billiard Room. Darwin bought the billiard board from Hopkins and Stevens in February 1859 for £54.¹⁹

1876 Schemes 7 A pale blue scheme which must still have been on the panelling when the inventory was drawn up in 1882. It is based on Prussian blue and is painted over a light grey undercoat. This scheme probably dates from the conversion of the room from Billiard Room to

¹⁸ Letter from Darwin to Cathy, 24 July 1842, *Correspondence* Vol 2 pp 323-325. 'Dining Room, 21x18'

¹⁹ Quoted from Bryant J, *Darwin at Down*, 1997 p 26 no source given

sitting room for Francis Darwin, although, by 1882, it is referred to in the inventory as 'Mrs Darwin's Sitting Room on N Blue Paint.'

1890 to 1925 *Schemes 8 to 13* Throughout the next six schemes, the joinery is painted white. The first four schemes are lead based.⁽¹⁷⁾ The last two white schemes are based on zinc oxide and therefore could date from any time between 1920 and 1950.

1929 *Scheme 14* There is a radical change to dark mahogany graining on the panelling, covered with a heavy resin varnish. This presumably dates from Buckston Browne's attempt to recreate the nineteenth century interiors. Similar colours are applied to the stairs, see Staircase Hall, scheme 25.

1950 to 1980 *Schemes 15 to 18* The joinery is painted a mid-green, based on titanium dioxide and therefore probably dates from the period after 1950. There may have been other paint layers applied to the panelling before it was stripped, apparently in the 1960s. The cornice was painted white another three times.

Table 2.5.1 the Billiard Room, Room 14, Schemes 1 to 6

Nominal date	1805	1815	1825	1835	1845	1860
Scheme	1	2	3	4	5	6
Joinery DW/ER/pi-iv	lead white u/c and verditer blued white	white	white	dark buff	emerald green	emerald green
Cornice DW/ER/ci-ii	white distemper	white distemper	white distemper	white	white distemper	white distemper

Table 2.5.1 the Billiard Room, Room 14, Schemes 7 to 12

Nominal date	1876	1890	1900	1910	1915	1920
Scheme	7	8	9	10	11	12
Joinery DW/ER/pi-iv	light grey u/c and pale Prussian blue	white	white	white	white	zinc white
Cornice DW/ER/ci-ii	white	white distemper				

Table 2.5.1 the Billiard Room, Room 14, Schemes 13 to 18

Nominal date	1925	1929	1950	1960	1970	1980
Scheme	13	14	15	16	17	18
Joinery DW/ER/pi-iv	zinc white	dark mahogany graining	mid green titanium oxide	white		
Cornice DW/ER/ci-ii				white	white	white

2.6 The Dining Room, Room G2

The room is on the west side of the eighteenth century block. It was given a bay window and heightened in 1843. It was used as the family drawing room until 1858 when, following the addition of the new Drawing Room, Room G5, at the north-west corner of the house, it became the Dining Room. At this point, the windows were replaced with plate glass sashes to match those in the new Drawing Room. The plaster cornice was also replaced in a similar style to that in the new addition.

Like the Drawing Room, all the joinery has been radically stripped. The door was extensively examined but it has been so thoroughly cleaned, it may have been dipped in solvent. This contrasts with the eighteenth century door to the Old Study where the paint was burnt off twice, a technique that always leaves some residue. The paint removal included the plaster cornice and the little panel set over the door.

The plaster walls have always been wall papered, no paint has ever been used directly on the plaster. The north wall, however, retains the timber dado panelling which is probably contemporary with the dado panelling in the Billiard Room, Room G14.

No eighteenth century paint was found on the joinery. Pink was used on the window shutters and plaster cornice when they were first installed in 1858. The pink scheme was then repeated twice and followed by two coats of white. Remarkably, these five schemes appear to fall within a period of ten years. Probably, on the basis of photographic evidence, by about 1867, the first of two coats of wood graining was applied. The second was still current in 1880. No early twentieth century paint layers survive. In recent years the joinery has been painted white.

1858 Schemes 1 to 3 Three pink schemes applied to the window joinery introduced into the room in 1858. Two of them⁽¹⁸⁾ are based on the pigment vermilion. Vermilion tinted paint is also used on the cornice, and frieze above the door but it could relate to either schemes 1 or 3.⁽¹⁹⁾

1865 to 1867 Schemes 4 and 5 The window shutters, skirting and cornice are painted white. The first of the two coats on the cornice is probably a distemper.

1870 to 1880 Schemes 6 and 7 Two coats of light oak graining applied to the window shutters and skirting. Probably the first of these appears on the window shutters in the photograph inscribed 'Bessy Taken by LD', taken about 1865.²⁰ The second is probably that shown in the photograph of the Dining Room printed by W England, from 1876, where, in the reflection of the door in the overmantel mirror, the door appears dark in contrast with the surrounding walls and frieze above.²¹

1915 to 1960 Schemes 8 to 14 Seven schemes, predominantly white and apparently later than the early years in the twentieth century.²² The skirting board in Scheme 8 is painted brown black on a white undercoat. The last two schemes are based on titanium dioxide and therefore post-date the 1940s.

²⁰ CUL DAR 219.12:11

²¹ See list of relevant visual sources appended to this report

²² See note in introduction to Dining Room above but no reasons stated!

Table 2.6.1 The Dining Room, Room G2, Schemes 1 to 6

Nominal date	1858	1860	1862	1865	1867	1870
Scheme	1	2	3	4	5	6
Shutters DW/D/4a-g	white undercoat and pink vermilion	pink vermilion	pink vermilion	white	white undercoat and white	light oak graining
Skirting DW/D/7a-d,8a-b,9				white	white undercoat and white	light oak graining
Panel over door and cornice DW/D/1a-e	pale pink ⁽²⁰⁾	pale pink	pale pink	white distemper	white	white distemper
Door and windows DW/D/2a-d,3a-c						

Table 2.6.2 The Dining Room, Room G2, Schemes 7 to 12

Nominal date	1880	1915	1920	1925	1930	1940
Scheme	7	8	9	10	11	12
Shutters DW/D/4a-g	light oak graining	white	white	white	white	white
Skirting DW/D/7a-d,8a-b,9	light oak graining	brown/black				
Panel over door and cornice DW/D/1a-e	white	white	white distemper			
Door and windows DW/D/2a-d,3a-c						

Table 2.6.3 The Dining Room, Room G2, Schemes 13 to 14

Nominal date	1950	1960
Scheme	13	14
Shutters DW/D/4a-g	white undercoat and titanium white	white undercoat and titanium white
Skirting DW/D/7a-d,8a-b,9	white undercoat and titanium white	white undercoat and titanium white
Panel over door and cornice DW/D/1a-e	white	white undercoat and titanium white
Door and windows DW/D/2a-d,3a-c	white undercoat and titanium white	white undercoat and titanium white

2.7 The Kitchen, Room G1

The service block at the south end of the house was rebuilt in 1848 but some parts of the earlier service wing were retained. Five joinery elements were examined and although all were found to belong to different periods, they do not appear to incorporate reused timber. Listed in order of age:

- 1 Door
- 2 Panelling on the east wall
- 3 Cupboard in the east wall
- 4 Door architrave
- 5 Panelling under the window

It is not possible to be categorical about where the reconstruction of the service block in 1848 occurs in the paint sequence. The kitchen is a room which will have been frequently painted, so the number of paint layers compared to those in the rest of the house is not helpful. There are three points in the sequence which could mark the rebuilding, the association of the door with the panelling, the building of the wall cupboard and the fixing of the architrave around the door. The best candidate is the second, since the paint is very similar to that used on the service stairs, built new in 1848. In the accompanying table the nominal dates for the schemes are calculated at eight year intervals.

1776 to 1816 Schemes 1 to 6 The door has more paint layers than any other feature in the room, and the earliest layers are certainly from the eighteenth century, as they match those found on the main stair bannisters and the Old Study door. Among these early layers is one of the distinctive two-tone brown and orange schemes that could be a form of early graining.

The surrounding panelling on the east wall has certainly been associated with the door since the seventh scheme but the very earliest layers do not correspond. They are putty coloured, while the door is dark brown. However, doors were often picked out in darker browns and the two items may have been together since the panelling was first built.

The paint layers on the panelling are separated by very heavy layers of dirt. The dirt is grease rather than dust and probably means that the panelling has always been in the kitchen area.

1824 to 1840 Schemes 7 to 9 The panelling and the door are treated as one in these three schemes and subsequently, with the exception of scheme 15. The first scheme is a pinkish colour. From now on, there is no more heavy build up of grease between layers of paint and the room is treated with much lighter colours. As the room is still a kitchen, the reduction in grease may be the result of a different type of cooking range.

1848 to 1888 Schemes 10 to 14 The cupboard in the east wall is installed and the joinery is primed with a white containing particles of red lead and then painted cream. This combination is the first layer of paint on the service stairs which presumably date from 1848. The joinery is then given another four coats of cream.

1888 to 1928 Schemes 15 to 20 The architrave around the door is installed. All the joinery is then painted off-white, scheme 15. Four more cream schemes follow, schemes 16 to 19 and finally a white, scheme 20.

1936 to 1970 Schemes 21 to 24 The panelling under the window is primed with a red lead and then all the joinery in the room is painted with a zinc based white, scheme 21. In the subsequent scheme, 22, the joinery is picked out in blue and white, both zinc based. Two further white schemes follow.

Table 2.7.1 The Kitchen, Room G1, Schemes 1 to 6

Nominal date	1776	1784	1792	1800	1808	1816
Scheme	1	2	3	4	5	6
Door DW/K/2	cream	light orange brown with dark brown	dark brown with glazing	dark brown	dark brown	grey
East wall panel DW/K/4			cream	cream	cream	cream
Cupboard in east wall DW/K/5						
Door architrave DW/K/1,16						
Panelling under window in south wall DW/K/3						

Table 2.7.2 The Kitchen, Room G1, Schemes 7 to 12

Nominal date	1824	1832	1840	1848	1856	1864
Scheme	7	8	9	10	11	12
Door DW/K/2	pinkish cream	cream	cream	white with red lead undercoat and cream	cream	cream
East wall panel DW/K/4	pinkish cream	cream	cream	white with red lead undercoat and cream	cream	cream
Cupboard in east wall DW/K/5				white with red lead undercoat and cream	cream	cream
Door architrave DW/K/1,16						
Panelling under window in south wall DW/K/3						

Table 2.7.3 The Kitchen, Room G1, Schemes 13 to 18

Nominal date	1872	1880	1888	1896	1904	1912
Scheme	13	14	15	16	17	18
Door DW/K/2	cream	cream	off white	cream	brown	cream
East wall panel DW/K/4	cream	cream	off white	cream	cream	cream
Cupboard in east wall DW/K/5	cream	cream	off white	cream	cream	cream
Door architrave DW/K/1,16			off white	cream	cream	cream
Panelling under window in south wall DW/K/3						

Table 2.7.1 The Kitchen, Room G1, Schemes 19 to 24

Nominal date	1920	1928	1936	1950	1960	1970
Scheme	19	20	21	22	23	24
Door DW/K/2	cream	white	zinc based cream	zinc based pale blue and white	white	white
East wall panel DW/K/4	cream	white	zinc based cream	zinc based pale blue and white	white	white
Cupboard in east wall DW/K/5	cream	white	zinc based cream	zinc based pale blue and white	white	white
Door architrave DW/K/1,16	cream	white	zinc based cream	zinc based pale blue and white	white	white
Panelling under window in south wall DW/K/3			red lead undercoat and zinc based cream	zinc based pale blue and white	white	white

3 The interior, the first floor

3.1 Dr Darwin's Study, Room F14

The room is identified as Dr Darwin's Study in the inventory of 1882. Dr Darwin was Francis Darwin, Charles Darwin's son. The inventory also refers to a 'Dressing Room adjoining.'

The bulk of the panelling appears to form part of the construction of the five bay fronted main block which, on stylistic grounds, probably dates from about 1740. The nominal dates ascribed to the paint schemes are calculated on the basis of an assumed ten year interval between redecoration.

The panelling, however, is not all of one period and type. The east and north walls are raised and fielded ovolo, the south-east corner of the room is plain ovolo. Although contemporary, the different types of panelling represent at least two rooms. From the design of the panelling, it is clear that, in the eighteenth century, Room F14 was subdivided by a partition wall between the southern two windows in the east wall and a second wall abutting the western edge of the panelling on the chimney breast. These two walls enclosed a small closet lit by the south window and heated by the fireplace on the south wall. Furthermore, there is evidence in the floor frames that the main staircase in the eighteenth century was located in the south-west corner of the room. This area is therefore likely to have been treated separately.

All the panelling has eighteenth century paint and presents a coherent sequence with no variation except for the panelling on the south wall in the area occupied by the earlier staircase. The difference is in the first coat. The main panelling is mid brown, the section on the south wall cool grey. After that, both sets of panelling present the same sequence, a deep green followed by five coats of white. The door to the landing appears to have been added to the sequence slightly later with a first coat of brown followed by three coats of white.

From about 1800, there follows a sequence of seven buff or cream schemes. Midway through this, the north wall of the closet is removed. It was probably relocated one bay to the north, since a panel wall stood on this line in the 1960s. The resulting small closet, lit by the central window in the five bay front, probably became the room referred to in the inventory as the 'Dressing Room adjoining' Dr Darwin's Study. At the same time a reused eighteenth century door was installed across the recess to the east of the chimney breast to form a cupboard.

From about 1900 four white schemes follow, the last two being zinc based and therefore likely to date from about 1920. Then a sequence of light green, brown, white and pink.

1740 Scheme 1 The raised and fielded panelling on the north, east and west walls and the plain panelling in the south east corner of the room, is primed with a red brown iron oxide undercoat and then painted with a mid-brown and a coat of varnish. The brown is an interesting mixture of umbers, charcoal black, red ochre, lead white and a lot of chalk.

The panelling on the south wall, west of the chimney breast, in the area of the eighteenth century staircase, was given the same primer but then finished in a cool grey, a simple mixture of lead white and charcoal black. The installation of this section of panelling appears to post-date a round arched or segmental headed window in the south wall which would have lit the staircase. Because this panelling has been fitted awkwardly into this space, it does not appear to be in its original location. Its general form and size, taken together with its subsequent paint history, indicate that it does originate from this floor of the house. Its installation in this location probably coincides with the removal of the staircase to its present site, probably about 1780.²³

²³ See Keystone, *The Final Report*, March 1998

The cupboard door across the recess next to the chimney breast is included in this scheme because it is first painted with a dark brown and orange brown, similar to that found in the Staircase Hall, see schemes 1 and 4, and on the door to the Kitchen, schemes 2 and 3. The character of this scheme suggests that it is contemporary with the panelling in the room, but originates from somewhere else in the house.⁽²¹⁾

1750 Scheme 2 All the panelling including the section on the south wall, is painted with a deep green made from Prussian blue and yellow ochre. The cupboard door, again treated differently, with another coat of brown and orange brown, is still in another room.

1760 to 70 Schemes 3 and 4 All the panelling is painted white. The cupboard door is also painted white but is probably not introduced into the room until 1840, scheme 11.

1780 Scheme 5 Again the panelling is painted white. The door to the landing may be introduced at this date. The first paint on the door is a lead white priming with a dark brown or graining effect. It is possible that the door was coloured to contrast with the surrounding panelling or that it derives from another location. From this scheme on, the door is treated in the same way as the panelling.

1790 to 1800 Schemes 6 and 7 The panelling and the door to the landing are given another two coats of white.

1810 to 1830 Schemes 8 to 10 The panelling and door to the landing are given three coats of cream or buff colour.

1840 to 1870 Schemes 11 to 14 The panelling and door to the landing receive another four coats of cream or buff. It is at this point the cupboard door is installed in the room and from now on conforms to the sequence for the rest of the room.

1880 to 1890 Schemes 15 and 16 The panelling and doors are all painted white in two schemes.

1920 to 1930 Schemes 17 and 18 The room is twice painted throughout with a zinc based white. The presence of zinc indicates a date in 1920s. The cupboard which stood against the west wall in 1997 was constructed when the second scheme was applied. However, it was only moved to this location in 1972.⁽²²⁾

1940 to 1970 Schemes 19 to 22 A succession of four schemes applied throughout the room, pale green, brown, white and then pink.

Table 3.1.1 Dr Darwin's Study, Room F14, Schemes 1 to 6

Nominal date	1740	1750	1760	1770	1780	1790
Scheme	1	2	3	4	5	6
Panelling on north, east and west walls and chimney breast DW/14/1,2,5,7,8,9,11,13	red/brown iron oxide undercoat and mid brown with varnish	deep green	white	white	white	white
Panelling on south wall west of chimney breast DW/14/3	red/brown iron oxide undercoat and cool grey	deep green	white	white	white	white
Door to landing DW/14/6					lead white undercoat and dark brown or graining	white
Panelling on east wall where partition wall is removed DW/14/12						
Cupboard door to left of chimney DW/14/10	(dark brown and orange brown)	(dark brown and orange brown)	(white)	(white)	(white)	
Cupboard on west wall DW/14/4						

Table 3.1.2 Dr Darwin's Study, Room F14, Schemes 7 to 16

Nominal date	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890
Scheme	7	8	9	10	11	12	13	14	15	16
Panelling on north, east and west walls and chimney breast DW/14/1,2,5,7,8,9,11,13	white	cream	cream	cream	cream	cream	cream	cream	white	white
Panelling on south wall west of chimney breast DW/14/3	white	cream	cream	cream	cream	cream	cream	cream	white	white
Door to landing DW/14/6	white	cream	cream	cream	cream	cream	cream	cream	white	white
Panelling on east wall where partition wall is removed DW/14/12					cream	cream	cream	cream	white	white
Cupboard door to left of chimney DW/14/10					cream	cream	cream	cream	white	white
Cupboard on west wall DW/14/4										

Table 3.1.3 Dr Darwin's Study, Room F14, Schemes 17 to 22

Nominal date	1920	1930	1940	1950	1960	1970
Scheme	17	18	19	20	21	22
Panelling on north, east and west walls and chimney breast DW/14/1,2,5,7,8,9,11,13	zinc white	zinc white	pale green	brown	white	pink
Panelling on south wall west of chimney breast DW/14/3	zinc white	zinc white	pale green	brown	white	pink
Door to landing DW/14/6	zinc white	zinc white	pale green	brown	white	pink
Panelling on east wall where partition wall is removed DW/14/12	zinc white	zinc white	pale green	brown	white	pink
Cupboard door to left of chimney DW/14/10	zinc white	zinc white	pale green	brown	white	pink
Cupboard on west wall DW/14/4		zinc white	pale green	brown	white	pink

3.2 The Drawing Room extension bedroom, Room F5

The Drawing Room, Room G5, was built in 1858 with first floor bedroom accommodation above. The surviving joinery appears to be original.

1858 *Scheme 1* The skirtings, windows and door were painted a uniform, dark cream colour. The walls were given a coat of white distemper, presumably to allow the plaster time to dry. The first proper decoration involved wall paper. No trace of this was found.

1876 to 1910 *Schemes 2 to 5* The joinery is painted three times in a lighter shade of cream. The walls appear to have been papered throughout this period.

1920 to 1930 *Schemes 6 and 7* The joinery is painted twice with zinc based white paint.

1937 *Scheme 8* The wall paper is stripped and the room is painted in two shades of violet, a darker colour on the joinery and a lighter shade on the walls,

1945 *Scheme 9* The joinery is painted white and the walls, white.

1950 to 1965 *Schemes 10 to 13* The walls and joinery are painted white.

1970 *Scheme 14* White joinery, walls lined with paper painted pink.

1980 *Scheme 15* The room is painted white throughout.

Table 3.2.1 The Drawing Room extension bedroom, Room F5, schemes 1 to 7

Nominal date	1858	1876	1890	1900	1910	1920
Scheme	1	2	3	4	5	6
Door, windows, skirting DW/BBR/1,2,3,5,6,7,7b	dark cream	cream	cream	cream	cream	zinc white
Walls DW/BBR/4,4b	white distemper (and wall paper)	(wall paper)	(wall paper)	(wall paper)	(wall paper)	(wall paper)

Table 3.2.2 The Drawing Room extension bedroom, Room F5, schemes 7 to 15

Nominal date	1930	1937	1945	1950	1955	1960	1965	1970	1980
Scheme	7	8	9	10	11	12	13	14	15
Door, windows, skirting DW/BBR/1,2,3,5,6,7,7b	zinc white	violet	grey	white	white	white	white	white	white
Walls DW/BBR/4,4b	(wall paper)	violet	white	white	white	white	white	lining paper and pink	white

3.3 The New Study extension bedrooms, Rooms F16 and 17

Like the Drawing Room extension of 1858, the New Study extension built in 1876 was a two storey addition to the north end of the house. There were two bedrooms on the first floor, Rooms F16 and F17. According to the inventory of 1882, the corridor between F5 and F17 terminated in the Housemaid's Closet. The two rooms were initially decorated as a pair with different colours from those used in Room F5. No old paint was found on the doors which have been very thoroughly stripped.

1876 Scheme 1 Both rooms are papered, the cornice painted white, the ceiling, skirting mouldings off white, skirting fascia and window joinery glazed green. The joinery is prepared with a pink priming of lead white and red lead and then painted white. Some of this is left exposed on the skirting mouldings and possibly the door but most of the woodwork is then painted a light, bright green. The final coat is a translucent green glaze.

1890 to 1910 Schemes 2 to 4 Three schemes in which the joinery is painted white, the walls remain papered.

1920 to 1930 Schemes 5 to 6 Two zinc based schemes, the first white joinery in both rooms, the second white in the north room, F17, and pink in the south. The walls are papered.

1940 Scheme 7 Titanium white applied to the joinery. The northern room is lined with paper and painted white. The southern room remains papered.

1950 Scheme 8 Walls and joinery painted white, except for the southern room where the walls are painted cream.

1960 Scheme 9 The northern room is painted white, the joinery in the southern room is painted blue.

1970 Scheme 10 The joinery in the southern room is painted white the walls are lined with paper and painted white.

Table 3.3.1 The New Study extension bedrooms, Rooms F16 and 17, Schemes 1 to 5

Nominal date	1876	1890	1900	1910	1920
Scheme	1	2	3	4	5
Room F17, windows and skirting fascia DW/LIB/1,2,3,5,7	lead white and red lead primer, white, bright green and translucent glaze	white	white	white	zinc white
Room F17, walls DW/LIB/4a,4b	(paper)	(paper)	(paper)	(paper)	(paper)
Room F16, windows and skirting fascia DW/SBR/2,2b,4	lead white and red lead primer, white, bright green and translucent glaze	white	white	white	zinc white
Room F16, walls DW/SBR/1a,1b	(paper)	(paper)	(paper)	(paper)	(paper)

Table 3.3.2 The New Study extension bedrooms, Rooms F16 and 17, Schemes 6 to 10

Nominal date	1930	1950	1960	1970	1980
Scheme	6	7	8	9	10
Room F17, windows and skirting fascia DW/LIB/1,2,3,5,7	zinc white	titanium white	white	white	
Room F17, walls DW/LIB/4a,4b	(paper)	lining paper and white			
Room F16, windows and skirting fascia DW/SBR/2,2b,4	pink	titanium white	white	blue	white
Room F16, walls DW/SBR/1a,1b	(paper)		cream		lining paper and white

Bibliography

The following is a chronological list of English Heritage internal reports which have been generated during the restoration of Down House since 1995

Lea R *Down House, Bromley, notes on the historical development of the house* June 1995

Miele C *Darwin's Garden, the estate and gardens at Down House, Bromley, a preliminary assessment* May 1996

Lea R *Down House, Bromley, notes on the inventory made following the death of Charles Darwin in 1882 and how it relates to the house today* September 1996

Keystone *Interim report on the Structure and Development of Down House, Kent* October 1996

Keystone *The joinery and other detail discussed in relation to the Development of Down House, Kent* December 1996, revised February 1997

Lea R *Notes on the baize door, GD19, between the hall, G11, and the servants area, G10* July 1997

Bryant J *Darwin at Home, the collection and interior decoration at Down House* September 1997

Lea R *Down House, Bromley, Kent, notes on the trellis attached to the walls of Down House shown in photographs and watercolours dating from Charles Darwin's residency* December 1997

Keystone *The Historic Development of Charles Darwin's 'good, very ugly house,' Down House, Downe, Bromley, the final report* March 1998

Keystone *Down House, Documentary History and Sources* March 1998

Keystone *Down House, Historic Room Data Sheets* March 1998

Lea R *Down House, Bromley, Kent, notes on the sunblinds shown in photographs of the garden front which date from Charles Darwin's lifetime* March 1998

Appendices

1 Key dates in the development of the house relevant to the paint analysis

1740	Five bay central block first built, dated on stylistic grounds
1780-1800	Relocation of staircase and front door set in north wall, dated on stylistic grounds
1835	Roof rebuilt at higher level under direction of local architect Cresy
1842	The Darwins move in, Room G14 used as a dining room, G2 as drawing room, G15 as Charles Darwin's study
1843	The entrance hall added, front door moved to east side of the house, and bay added to the drawing room, Room G2
1846	Th old kitchen partially demolished and the service wing built anew
1857-8	Rooms G5 with F5 and F4 above, are added to the north-west corner of the house, although intended to be the new dining room, G5 became the new Drawing Room, G2 became the Dining Room and G14 became the Billiard Room. The bay windows in Room G2 were altered to match those in the new extension.
1872	The verandah is added to the New Drawing Room, G5
1876-7	Rooms G16, with F16 and 17 above, are added to the north-east of the house and the front door is possibly replaced. G16 was intended as a new billiard room, but soon became Darwin's New Study, Room G15, The Old Study became a smoking room, Room G14, the Billiard Room became Francis Darwin's sitting room.
1882	Charles Darwin dies and the Inventory listing room titles is drawn up.
1907	Down House School takes possession of the house.
1927	House taken over by Buckston Browne and the British Association, house restored as a museum
1953	The Royal College of Surgeons take over the lease
1962	First and second floors converted as a flat for Hedley Atkins
1996	Purchased by English Heritage

2 List of relevant visual sources

Pencil drawings of Down House, by Col. Johnson, c 1830, Down House Collection

The house from the north

The house from the east

Darwin family photographs by William Darwin, c 1860-1880, Down House Collection

Darwin on his horse in front of the front door, c 1868

Photographs by W England, St James' Square, Notting Hill, London, W., Down House Collection. They probably date from 1876 when Emma Darwin wrote to Leonard, 'Frank has now been a week at home.... We have had great delay in getting the rooms photographed but now I hope we shall really move the things & and get him established in the billiard room which will hold most of his carved furniture.' CUL DAR 239.1:39

The Old Study, Room G15

The New Study, Room G16 looking north

The New Study, Room G16 looking north-east

The Dining Room, Room G2

The Drawing Room, Room G5 looking north

The Drawing Room, Room G5 looking south

Watercolours by Goodwin, 1880, Down House Collection

The garden front from the north-west

The garden front from the south-west

Engravings after watercolours by Alfred Parsons in 1882, published in the Century Magazine 1883, Down House Collection.

The house from the east

The garden front from the north-west

The New Study

The greenhouse

Watercolour by J Wedgwood, 1886, Down House Collection

The garden front from the south-west

Photographs from the Down House School Prospectus, c 1910, Down House Collection

The east front

The hall

Photograph of the Old Study after its restoration by Buckston Browne, c 1930, Down House Collection

Endnotes

Points requiring action or comment, numbers shown in the text in parentheses and superscript

- 1 But in the eighteenth century is a varnish layer likely?
- 2 But there are no dado samples shown in the tables.
- 3 Sample DW/FH/9, taken from the entrance hall side of the door to the New Study, should relate to the construction of the New Study, ie no earlier paint schemes, but it is not included in the Entrance Hall table, why not?
- 4 But which scheme? It is not shown in the table.
- 5 But the blue paint in section looks very similar to Scheme 6. Also we have documentary evidence suggesting the room was papered within a few monthsnot at all impossible but are we sure about this?
- 6 What does this mean? Is there any evidence for another coat of oil gilding in this scheme or not?
- 7 There is yellow? Colour block shown in between schemes 11 and 12 for the joinery on Catherine's diagram which is not accounted for in the text.
- 8 Is this dark blue also titanium based?
- 9 Is this the shelf in the south window? If so the supports for this shelf, battens crudely screwed to the shutter linings look very modern. Could it be that the timber is reused panelling?
- 10 Is it plaster above the window in the Old Study or timber? Catherine Hassal states in her text that the walls were papered in the mid C19, but gives no sample no. How does she know this?
- 11 door reveal sample no F?
- 12 door reveal sample no F?
- 13 Glass doors to Old Study bookcase no sample number quoted
- 14 door reveal sample no F?
- 15 Glass doors to Old Study bookcase no sample number quoted
- 16 Or do schemes 5 or 6 give a better match?
- 17 Catherine inserts a note here 'in almost all the rooms, the School used plain white to cover up the dark 19th century colours - the exception was the New Study which was painted green'
- 18 Which two ? They all look the same in the table.
- 19 I don't understand this comment. On Catherine's table, the first three paint layers on the cornice appear to be the same!
- 20 Catherine's table shows the first colour on the frieze above the door as a distemper but in the text accompanying the cross section photograph it is described as an oil paint.
- 21 Note Catherine puts this in to scheme 6 in her table but the first scheme is surely more closely associated with schemes 1 and 2
- 22 Check this date