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THE QUEEN'S ANTE-CHAMBER WALL HANGINGS AND RELATED DAMASKS

MAY BERKOUWER

INTRODUCTION

Conservation of the Queen's Ante-Chamber wall-hangings provided an unparalleled opportunity to uncover their full history. When conservation treatment of the west wall-hanging started in 2009 at May Berkouwer Textile Conservation Studio, Sudbury, Suffolk, it became evident that extensive restoration had taken place in the past. This led to further research and a much greater understanding of these wall-hangings, as well as of a range of associated textiles, both at Ham and elsewhere.

The major discovery was that the Queen's Ante-Chamber hangings had been significantly altered as part of the restoration of Ham commissioned by the 9th Earl of Dysart and carried out (c.1888–90) by George Frederick Bodley and Thomas Garner (see Hall, pp. 380–1). This established connections with other



Fig. 407 *The Queen's Ante-Chamber Wall-hangings on the West and North walls (part of a set of five), silk and linen damask panels, c.1888–90, impaned with blue silk velvet borders with silver-gilt metal thread embroidery and with blue silk damask corner motifs with silver-gilt metal thread embroidery subsequently made into appliqué, edged with silver gilt and silk tasseled fringe, c. 1679–83. 106¼ × 122¼ in. 270 × 312 cm and 105½ × 24¼ in. 268 × 63 cm and 105½ × 160¼ in. 268 × 407 cm.*

Ham textiles, such as those in the Green Closet, but – most significantly – it demonstrated the very close link with the ex-Volury Room wall-hangings.

This appendix indicates how a conservator's observation, technical analysis and research into material evidence can trigger historical research and substantiate curatorial knowledge.

THE QUEEN'S ANTE-CHAMBER WALL-HANGINGS

DESCRIPTION

The wall-hangings in the Queen's Ante-Chamber were installed after 1679, replacing green velvet hangings in what was then named the Green Drawing Room, and described in the 1679 inventory as 'Added 3 peices of blew Damusk inpain'd wt blew velvet embroidered wt Gold, Mounted wt Silk & Gold fringe'.¹ In the 1683 inventory the room was 'hunge with foure Pieces of blew Damusk, impaned and bordered wth. blew velvet embroidered wth. gould and fringed'.² In fact, the set is made up of five wall-hangings covering three walls, and the



Fig. 408 *The Queen's Ante-Chamber Wall-hangings on the North and East Walls (part of a set of five), showing how the room may have looked with blue damask; this image has been digitally re-coloured, c.1679–83. 105½ × 160¼ in. 270 × 408 cm. and 105½ × 25¼ in. 268 × 63 cm and 106¼ × 29¼ in. 270 × 74 cm.*

variation in numbers has probably arisen because the three north wall-hangings were designed to appear as one, whilst hiding two jibdoors (figs 407 and 408). The present colour of the golden-yellow damask panels (figs 407, 410) had previously been put down to age and light damage.³ However, these damask panels are in fact nineteenth-century replacements in a two-tone, pink and drab fabric which has faded to yellow. The now contrasting corner motifs were cut from the original blue panels and applied onto the replacement damask, and still show the original blue damask colour mentioned in the seventeenth-century house inventories (fig. 408).

The shape and size of each of the five wall-hangings was planned to fit the given space. Detailed investigation of the elements of the construction of all the north wall-hangings showed that the separation for the jib-door openings on the north wall are original and integral to the structure, indicating that the wall-hangings were made to fit the room. A slight error must have occurred, as the right-hand side of the north-west hanging was turned in by approximately four centimetres. The stitching threads indicate that the turning was made at the time of installation, when the already attached fringe was relocated onto the new turning. On this turning, small sections of the untarnished silver-gilt thread embroidery of the borders and appliqué motifs can still be found (fig. 409).

The velvet borders are elaborately embroidered. The outer borders have repeated sections of stylised, symmetrical floral arrangements which meet in a flower motif, set at forty-five degrees in the corners. The vertical borders between the damask panels differ, with a vertical design of waving floral stems with foliage and flowers rising upwards. The main west and north walls have large corner



Fig. 409 *Detail on reverse, North-West Wall-hanging, showing the untarnished silver-gilt embroidery on unfaded blue silk damask of the corner motif, c.1679–83. The pink and drab damask is the unfaded 'Dysart' damask, c.1888–90. 105¼ × 24¼ in. 268 × 63 cm.*



Fig. 410 *West Wall-hanging (part of a set of five), silk and linen damask panels, c.1888–90, impaned with blue silk velvet borders with silver-gilt metal thread embroidery and with blue silk damask corner motifs with silver-gilt metal thread embroidery subsequently made into appliqué, edged with silver gilt and silk tasseled fringe, c.1679–83. 106¼ × 122¼ in. 270 × 312 cm.*

motifs positioned at a forty-five-degree angle, in line with the corner joins of the outer borders (fig. 410). The embroidery was designed to appear continuous along the outer borders, although on the north wall the fringe trimmings applied all round the edges of each hanging, including along the jib-door openings, interrupt the continuity of the design.

The original blue silk damask was woven in a pattern of flowers, leaves and pomegranates, intertwined at the stems and grouped together as a large motif in a *comber* repeat. The motifs are placed close together and appear to merge. In fact, they alternate in direction, leaning to the right in one row and to the left in the next. This type of damask pattern was popular in the seventeenth century, and many variations can be found.⁴ They are generally dated to the beginning or middle of the seventeenth century, and were woven in France and Italy.⁵ An almost identical pattern in a two-tone weave exists in Lyon and is dated to the early seventeenth century; it is very similar to the sea-green and white damask in the Volury Room wall-hangings (fig. 419).⁶ A range of similar damasks is also found at Ham, both original seventeenth-century fabrics and later reproductions.⁷

CONSTRUCTION

The wall-hangings were constructed by first joining together the vertical velvet borders and damask panels, then attaching the horizontal upper and lower velvet borders, all of which work was executed in silk back-stitching (fig. 411). The hangings were then applied to a full blue linen backing, ready for embroidering, which was all carried out through this linen backing.

The corner motifs were embroidered directly onto the blue damask panels and through the linen backing. In the c.1888–90 restoration, these corner motifs were re-used as appliqué upon the replacement damask (fig. 417).

All four outer edges of each of the hangings are trimmed with a silk and metal thread gimp, with a dense fringe of bell-shaped hangers of blue silk (fig. 412),



Fig. 411 Detail of stitching, North-West Wall-hanging, showing the silk back-stitching joining the blue silk damask panels to the blue silk velvet borders before application onto the blue linen backing, c.1679–83. The raw edge of the blue linen seen along the top is a result of the removal of the corner motif in the c.1888–90 restoration. 105¼ × 24¾ in. 268 × 63 cm.

Fig. 412 Detail of border, West Wall-hanging, showing the white chalk-like under-drawing on the tips of the velvet pile alongside some of the laid cords; also the fringe with braid and tassels. c.1679–83. 106¼ × 122¾ in. 270 × 312 cm.

which was originally stitched on mainly with white silk thread (yellow in a few places) (tables 1 and 3).

EMBROIDERY TECHNIQUE

The design for the embroidery was marked onto the velvet in a white, chalk-like substance that can be seen in places on the tips of the velvet pile (fig. 412). The under-drawing on the silk damask was applied in black ink on the west wall-hanging, and in white chalk on the north-east wall-hanging.

The embroidery was carried out mainly in laid couching through to the blue linen backing, using three types of silver-gilt metal thread (figs. 409, 411–14):⁸

- The main design is worked in outline embroidery of a white silk ‘Ondé’ cord wound with silver-gilt thread.⁹ The metal thread has a silk core wrapped with a flat metal strip. The cord is laid and stitched with white silk thread. There is also a laid, silver-gilt cord embroidery edging the inside of the velvet borders.
- The tips of the flower petals and leaves are highlighted with dense silver-gilt thread stitching, which is slightly raised over bundles of linen thread. These highlights were laid in close zig-zag pattern, securing four metal threads together, using both yellow and white silk threads. There is no recognisable pattern in the use of the two colours.
- The third type of silver-gilt metal thread was used for shading details inside the motifs, as individual stitches going through to the reverse of the backing and not laid couched.

DAMASK RESEARCH

In order to establish the pattern of the blue damask, of which only fragments remained, meticulous tracings were taken and pieced together to reconstruct as much as possible of the original design (fig. 414). The fragments available for study included the corner motifs, the cut remnants of the damask panels and the fragmented remains on the east wall, which survive almost intact, having suffered the least amount of light damage and retaining a section of blue silk damask

beneath the nineteenth-century damask (fig. 414). The fabric repeat was calculated from a single long fragment of the right-hand panel of the west wall-hanging (figs 415 and 417). Weave analysis was also undertaken (tables 5 and 6).

Once sections of the design started to emerge, it was realised that the replacement damask was in fact a close copy of the earlier pattern. It cannot be called a replica because, although the design is accurately copied, the materials and colours are different. The replacement has a silk warp with a wet-spun linen weft and was woven as a two-tone fabric in bright pink and drab (fig. 416). Watts & Co., founded by Bodley and Garner, sold fabrics of this design with the trade name ‘Dysart’, derived from the Ham House earldom.¹⁰



Fig. 413 Detail of reverse, North West Wall-hanging, showing the embroidery stitching through the linen backing; two rust-stained tack-holes along the lower edge from an earlier attachment. c.1679–83. 105¼ × 24¾ in. 268 × 63 cm.

TABLE 1: THE QUEEN’S ANTE-CHAMBER WALL HANGINGS

| HANGING | LOCATION | SIZE (approximately as the edges vary) | CONSTRUCTION |
|------------|--|--|---|
| West | West Wall | 106¼ × 122¾ in. h 270 × w 312 cm. | Full outer border. Three inner upright borders. Four damask panels. Four corner motifs. |
| North West | North Wall, left of jib door | 105½ × 24¾ in. h 268 × w 63 cm. | Three sides outer border. No upright borders. One damask panel. Two corner motifs. Additional turning on right-hand edge. |
| North | North Wall, centre and main wall space | 105½ × 160¼ in. h 268 × w 407 cm. | Top and bottom outer border. Six upright borders. Five damask panels. No corner motifs. |
| North East | North Wall, right of jib door | 105½ × 25¼ in. h 268 × w 64 cm. | Three sides outer border. No upright borders. One damask panel. Two corner motifs. No added turning. |
| East | East Wall, left of fire place | 106¼ × 29¼ in. h 270 × w 74 cm. | Four outer borders. No upright border. One narrow damask panel. No corner motifs. |

RESTORATION BY WATTS & CO.

The late nineteenth-century restoration of the wall-hangings involved complete replacement of the blue silk damask panels. The original damask was cut away quite crudely along the edges and the scissor cuts are evident in the fragmented remains beneath the current damask panels (fig. 417). The embroidered corner motifs were cut out together with the blue linen backing, leaving a square gap therein, then trimmed back and applied onto the replacement damask, introducing an additional blue check linen backing fabric (fig. 418). The additional turning on the north-west wall-hanging was maintained in the restoration (fig. 409).

The restoration must have resulted in a strongly contrasting appearance of dark blue borders around bright pink and drab damask panels with blue appliqué corner motifs (fig. 418).¹¹ No archival reference to this intervention has been found, and, despite recent studies of Bodley & Garner’s restoration of Ham, their intervention in the Queen’s Ante-Chamber was previously unknown and has been unpublished until now.¹²

SUBSEQUENT REPAIRS

The new ‘Dysart’ damask panels have severely deteriorated in the high light levels of this south-facing room. At least three stages of repair on the west wall-hanging are evident before the current conservation treatment.¹³ At some point, pieces of linen were inserted into the cut-out squares in the blue linen backing, apparently to improve the stability and to support the damask panels (fig. 417). The current lining of the wall-hangings is of this same linen fabric. The lining was only stitched once, which suggests that it was added after the first repairs. Undocumented stitched repairs of laid couching and patches of linen fabric inserted behind the weakened damask were added, as the fabric continued to deteriorate, and some of these penetrate the lining.¹⁴

The Victoria and Albert Museum also twice carried out conservation treatment to the damask panels of the north wall-hanging. In the early 1960s the silk panels were supported using adhesive.¹⁵ A protective layer of polyester gauze was added to the north wall panels, alongside full treatment of the north-east hanging in the 1980s. Fragments of blue damask beneath the damask panels had been noted, but the implications were not then realised.¹⁶

The deterioration of the damask panels, as well as of the embroidery, velvet borders and fringes, continued, mainly owing to exposure to light. The west

wall-hanging, north-west and east wall-hangings, were conserved during 2009–10. The north and north-east wall-hangings were treated in 2012. The conservation treatment of the whole set was completed in January 2013 and will be published in due course.

The National Trust has significantly reduced the light levels in the Queen’s Ante-Chamber to slow down the deterioration of these fragile textiles.

LINING AND FIXINGS

The wall-hangings were originally probably unlined, and numerous corroded holes along the edges indicate they were attached directly to the wall by tacks (fig. 413). Later, metal hooks were stitched on. Corrosion marks on the blue linen backing are evidence of earlier metal hooks, stitched directly onto the backing, indicating that the hook and loop system was introduced before the current lining, possibly by Bodley and Garner, or perhaps before that.

The whole hanging is now lined with the linen lining mentioned above. Along the edges, at regular intervals, are stitched steel hooks with a japanned or black-painted finish, dating from the late nineteenth or early twentieth century.¹⁷ These hooks are hooked onto metal U-bend staples in the wall.

The walls behind the hangings are covered with paper over hessian, painted along the edges in continuation of the wood-grain paintwork of the surrounding panelling. The paper dates from the late nineteenth century.¹⁸ Along the edges are tack-holes from previous attachments, and many more exist beneath the paper.

THE VOLURY ROOM WALL-HANGINGS

Another set of seventeenth-century wall-hangings survives at Ham, listed in the 1679 inventory as ‘Three peices of hangings of green & white Damask embroidered wth Gould Silver Scarlet & black impaned with hayre colour damusk’,¹⁹ of which now only fragmented embroidered borders and corner motifs remain (fig. 419).²⁰

The hangings are made up of vertical silk damask panels, surrounded by silk damask borders with diagonal joins at the corners. There are two types of silk damask, one single-tone yellow, the other two-tone sea-green and white, and these were joined alternately in vertical bands of full-width fabrics. The borders are of yellow damask (tables 2, 3 and 5). All joins are stitched in silk back-stitching, of



Fig. 414 Detail of blue silk damask panel 85.8 × 8.9 in 218 × 22.5 cm, East Wall-hanging, alongside the tracing of the remaining pattern, c.1679–83. 106¼ × 29¼ in 270 × 74 cm.



Fig. 415 Detail of blue silk damask tracing, West Wall-hanging; tracing the pattern in the longest remaining fragment of the right-hand damask panel to establish the weave repeat. c.1679–83. 106¼ × 122¼ in. 270 × 312 cm.

the type seen in the Queen's Ante-Chamber hangings (fig. 411) and the joined panels were applied onto a full linen backing. The borders are embroidered with a design of symmetrical floral motifs, carried out in silk floss thread and some laid metal thread. In each of the outer corners of the main field, a corner motif placed at a forty-five-degree angle was embroidered through the linen backing. The trimmings are of pink silk fabric, edged with narrow metal thread trimmings, and ruched by gathering at regular intervals; they are applied along the outer edges of the hangings, but not along the separations made for the jib door.

The surviving elements comprise eight border pieces of varying sizes from 278 × 486 cm. to 25 × 36.5 cm. All are in friable condition, having suffered light and water damage. The entire central fields have been removed, leaving clear scissor-cut marks. Parts of the borders were further cut into sections, and the edges of two corner pieces are secured with herringbone stitching of a later date.



Fig. 416 Detail of North Wall-hanging, central damask panel, 85 × 20.3 in. 216 × 51.5 cm., showing the 'Dysart' pattern, originally pink and drab, now faded, c.1888–90, c.1679–83. 105½ × 160¼ in. 270 × 408 cm.

The fragments form the outer borders of a set of hangings for three walls (table 2). The hanging for the largest wall is divided into two, with a narrow hanging on the left-hand side, to allow for a jib door. Despite some obvious differences in appearance, the construction and design of these hangings is very similar to those in the Queen's Ante-Chamber, suggesting that they were made in the same workshop (table 3). The warp counts and weave analyses of all three silk damasks are the same (table 5).

The hangings have been adjusted in height: the small and large hangings have a turning along the top and bottom edges, while the medium hanging has a turning along the lower edge only. These adjustments result in a height of around 278 cm. for all three hangings. The damask in the turnings is very well preserved, showing that the changes were made early on; excess trimming in the top section of the narrow wall-hanging shows that the trimmings were applied before the height adjustment was foreseen. This suggests that the hangings were modified at the time of installation.

The widths of the hangings fit the walls in the Volury Room, with the voluminous trimmings masking any gaps in the corners of the room. The height of the hangings does not coincide precisely with the cornice to dado measurement of the current Volury Room; the panelling may have been altered by the 4th Earl when the tapestries were fitted.



Fig. 417 Detail, West Wall-hanging, showing the right-hand damask panel removed; fragments of the original blue silk damask remain on the left hand side with crude cut marks; the white squares show how the corner motifs were cut out of the blue linen backing during the restoration c.1888–90, c.1679–83. 106¼ × 122¼ in. 270 × 312 cm.

The Volury wall-hangings are those shown in the 1886 Brewer watercolour of the North Drawing Room, thus providing a *terminus ante quem* for their removal thence. Brewer's views depict Ham as it was before the 9th Earl's changes (fig. 246; see Hall, p. 376).

There is no documented explanation for the crude removal of the central fields of the Volury hangings, or the cutting into sections. I cautiously suggest that Bodley and Garner had proposed to 'restore' these hangings also, but that the work was not completed. Might the two 'Dysart' damasks c.1888–90 used in the Green Closet have initially been produced for this intended restoration (see below)?



Fig. 418 Detail of right-hand replacement panel, 84½ × 19¼ in. 214 × 49 cm, detached and laid face-down onto velvet border and linen backing, West Wall-hanging, showing the unfaded pink and drab colours of the Dysart damask on the reverse; also the linen check backing introduced in the restoration, to which the original corner motif was stitched when applied onto the replacement damask c.1888–90, c.1679–83. 106¼ × 122¼ in. 270 × 312 cm.



Fig. 419 Volury Room Wall-hanging fragment of two borders and one corner piece, once part of the medium-size hanging, 109¼ × 161¼ in. 277 × 409.5 cm, of a set of three wall-hangings, c.1679–83. 47 × 87¼ in. 119.5 × 223 cm.

This suggestion is based on a practical interpretation of the material evidence so far. The scissor marks on the Volury hangings are very similar to those on the Queen's Ante-Chamber hangings. Restoration of the Volury hangings, along the lines of the Queen's Ante-Chamber hangings, may have been proposed but then abandoned for the technical reason that they proved too unstable after the removal of the entire central panels with linen backing. By contrast, on the Queen's Ante-Chamber wall-hangings with embroidered velvet uprights, only the damask panels were removed, leaving the linen backing intact except where the embroidered corner pieces were cut out (fig. 417). This maintained the stability of the hanging as a whole and enabled a straightforward replacement of the damask.

THE GREEN CLOSET

The walls of the Green Closet are covered with green silk damask, woven (1995–6) for the National Trust by Prella *et cie* of Lyon (figs 9–11), copying the pattern of the previous Watts & Co. Green Closet wall-hangings (*c.*1888–90), some of which survive in the textile store at Ham. They are in the ‘Dysart’ damask pattern as found on the Queen’s Ante-Chamber wall-hangings (tables 4 and 6).

As explained by Christopher Rowell (pp. 28–9), the 1995–6 silk damask design was copied from the previous Watts & Co. damask, which was already in store and much degraded, while the tone of green simulated that of three pieces of green silk damask from Ham in the collection of Colonial Williamsburg (USA).²¹ These pieces were sold from Ham in the early 1950s, and given to Williamsburg by the dealer Mr. S.W. (Sam) Wolsey, of 71–72 Buckingham Gate, London, who stated that they were ‘ex. Ham House’. They appear to date from *c.*1639 and are in remarkable condition.²² The pattern is similar to that of the Queen’s Ante-Chamber damask panels, but the motifs are larger and their arrangement indicates an earlier date for the design. The measurements of the Williamsburg panels led Annabel Westman and Christopher Rowell to suggest that they had been taken down from the south wall of the Green Closet when the door into the North Drawing Room was introduced, probably in 1672 (see Annabel Westman, pp. 248–9 and fig. 241; Rowell, p. 29).

In 1995–6, when the Queen’s Ante-Chamber hangings were still considered fully seventeenth-century, there had been little reason to examine the technical details of the Watts & Co. hangings from the Green Closet damask before commissioning its re-weaving from Prella *et cie*. The assumption continued that the same damask pattern had probably existed in the Green Closet since the early seventeenth century, and the differences in the pattern of the superficially similar damasks in Williamsburg were overlooked. It is only now that their probable *c.*1639 date, and even greater significance, has become evident. The Williamsburg fragments are of signal importance to the history of Ham and the Green Closet, as well as to textile history, as an extremely rare survival from the reign of Charles I.

In the light of the Queen’s Ante-Chamber discoveries, the *c.*1888–90 Watts & Co. damask from the Green Closet was re-examined and new information has

emerged. The three *c.*1888–90 wall-hangings from the Green Closet in the textile store at Ham are made of pale-gold damask, with a silk warp and wet-spun linen weft, in the pattern known as Watts & Co.’s ‘Dysart’. There was no green found in the original colour scheme of this damask, and the only green evident is in the remains of stitching of the trimmings. These trimmings, a two-tone green and ivory fringe, apparently date from *c.*1888–90, and were presumably supplied by Watts & Co. (fig. 22).²³ They have been re-used twice, first by the Victoria and Albert Museum in the 1980s and again by the National Trust in 1995–6, when the current hangings were supplied by Prella.

The *c.*1888–90 wall-hangings are lined with a medium-weight linen fabric, with a strip of linen along the top, and with japanned metal hooks on four sides. This is very similar to the lining and hanging system of the Queen’s Ante-Chamber wall-hangings. The early twentieth-century photographs of the Green Closet confirmed that it was of Watts’s ‘Dysart’ pattern.²⁴

Also of ‘Dysart’ pattern are the squab cushion covers (*c.*1888–90) from the Green Closet seat furniture but now in the Textile Store, having been replaced by the V&A in the 1980s, and again in 1995–6. This fabric is of the same ‘Dysart’ pattern, but it is woven as a two-tone damask with a pale silk warp and light-green, wet-spun linen weft.

It is suggested, therefore, that Watts & Co.’s ‘Dysart’ pattern damask was introduced to the Green Closet in *c.*1888–90 by the 9th Earl in two distinct colour ways (i.e. green and pale-gold), possibly those intended as reproduction fabrics for an abandoned ‘restoration’ of the Volury Room wall-hangings.

CONCLUSION AND FURTHER CONNECTIONS

Study of the damasks at Ham has established in far greater detail how they were used, and which ones were subject to late nineteenth-century restoration. This in turn has led to the discovery of other closely related seventeenth-century fabrics at Knole (NT), as well as a range of later nineteenth-century damasks also supplied by Watts & Co. (table 4). Some questions on details of design, construction and dating remain unanswered and will continue to be the subject of research.

TABLE 2: VOLURY ROOM WALL-HANGINGS

| HANGING | LOCATION | SIZE | CONSTRUCTION |
|--------------------------------|--|---|---|
| Small | East Wall | h 109 × w 78¼ in. 277 × 199 cm. | Four outer borders. Three damask widths. Four corner motifs. Additional turning at top and bottom. |
| Medium | West Wall | h 109 × w 161¼ in. 277 × 409.5 cm. | Four outer borders. Seven damask widths. Four corner motifs. Additional turning along the bottom. |
| Large – Main part – Small part | North Wall, with a jib door on the left. | h 109½ × w 191¼ in. 278 × 486 cm. h 109¾ × w 17 in. 279 × 43 cm. | Four outer borders. Nine damask widths. Four corner motifs. The jib-door opening cuts through the corner motifs on the left. Additional turnings at top and bottom. |

TABLE 3: COMPARISON OF THE CONSTRUCTION OF THE WALL HANGINGS IN THE QUEEN’S ANTE-CHAMBER AND THE VOLURY ROOM

| ELEMENT OF HANGING | QUEEN’S ANTE-CHAMBER HANGINGS | VOLURY HANGINGS |
|--|--|--|
| Linen backing | Blue | Undyed |
| Panels joined, then applied onto linen backing | Half-width velvet for borders; wider damask for panels; joined with silk backstitch. | Alternating full-width damask for main field, cut narrower for borders; joined with silk backstitch. |
| Damask | Blue single tone | Yellow single tone, and sea-green and white two-tone |
| Embroidery technique and Underdrawing | Laid silver-gilt metal thread embroidery with laid cord; stitched through to linen backing. Underdrawing: White chalk on velvet; black ink on damask. | Floss silk embroidery with laid silk-wrapped cord; stitched through to linen backing. Underdrawing: Black ink/white chalk on damask. |
| Embroidery design | Borders, floral design in silver-gilt metal thread, with matching corner motifs at 45°. | Borders, floral design mainly in silk, with matching corner motifs at 45°. |
| Trimming | Fringe, of silver-gilt metal woven heading, with blue silk tassels; applied with white/yellow silk thread. | Ruched trimmings of pink silk taffeta, edged on two sides with narrow metal braid. |
| Lining and Fixings | Originally no lining. First fixed with tacks; later fixed with hooks directly onto reverse along edges; later still lining with hooks, which attach into U-bend metal staples on the wall. | No lining. Tack holes found; hooks found stitched directly onto the reverse along the edges. |
| Jib-door opening | Designed from the beginning; fringe fitted along split edges. | Designed from the beginning; no trimmings along the split. |

TABLE 4: WEAVE ANALYSIS SILK DAMASKS

| | BLUE DAMASK QUEEN’S ANTE-CHAMBER | SEA-GREEN AND WHITE DAMASK VOLURY | GOLDEN-YELLOW DAMASK VOLURY |
|--------------------|--|---|--|
| Date/attribution | Seventeenth century, <i>c.</i> 1650s, France or Italy | Seventeenth century, <i>c.</i> 1650s, France or Italy | Seventeenth century, <i>c.</i> 1650s, France or Italy |
| Type of weave | ‘Damas satin de 5’ – Damask | ‘Damas satin de 5’– Damask | ‘Damas satin de 5’ – Damask |
| Warp: | Proportion: 1 single warp Material: silk, blue Pattern step (decoupure): 10 warp ends Thread count: 150–5 threads/cm | Proportion: 1 single warp Material: silk, white Pattern step (decoupure): 10 warp ends Thread count: 140–50 threads/cm | Proportion: 1 single warp Material: silk, yellow Pattern step (decoupure): 10 warp ends Thread count: <i>c.</i> 145–50 threads/cm |
| Weft: | Proportion: 1 single weft Material: silk, blue Pattern step: 2 weft shots (2 coups) Thread count: 26–7 threads/cm | Proportion: 1 single weft Material: silk, sea-green Pattern step: 2 weft shots (2 coups) Thread count: 23–6 threads/cm | Proportion: 1 single weft Material: silk, green Pattern step: 2 weft shots (2 coups) Thread count: 28–32 threads/cm |
| Internal structure | Background: 5-end satin, dec. 3, warp-faced Design: 5-end satin dec. 2, weft-faced | Background: 5-end satin, dec. 3, warp-faced Design: 5-end satin dec. 2, weft-faced | Background: 5-end satin, dec. 3, warp-faced Design: 5-end satin dec. 2, weft-faced |
| Pattern repeat | Warp: 63–5 cm Weft: approx. 27 cm | Warp: 72.5–73 cm Weft: approx. 27 cm | Warp: 57.5 cm Weft: 27 cm |
| Fabric width | Cannot reach selvages to measure the full width. | 55.3 cm full width, 52.9 cm selvedge to selvedge | 55.6 cm full width, 53.2 cm selvedge to selvedge. |
| Selvedge | Width: 1.4 cm Weave: 5-end satin, warp-faced. Warp in selvedge: 25 ends pink, 12 white, 25 pink, 12 white, 25 pink, 7 blue (tabby, double or triple thread) | Width: 1.2 cm 3 pink with 2 white satin stripes, sea-green tabby at the edge. | Width: approx. 1.2 cm 3 blue with 2 white satin stripes, yellow tabby at the edge. |
| Dye analysis | Indigotin ¹ | n/a | n/a |
| Weaving method | Woven on draw-loom, 2 picks per lift, typical for draw-loom weaving. | Woven on draw-loom, 2 picks per lift, typical for draw-loom weaving. | Woven on draw-loom, 2 picks per lift, typical for draw-loom weaving. |

¹ Rogers 2009.

TABLE 5: OVERVIEW OF THE DAMASKS AT HAM RELATED TO THE QUEEN’S ANTE-CHAMBER

| FABRIC TYPE AND DATE | TECHNICAL DETAIL | LOCATION AND NOTES |
|---|--|---|
| Green silk damask, late 1630s Installed for William Murray, later 1st Earl of Dysart | Silk warp, silk weft; fabric width 57.2 cm., including selvedges. selvedge, striped, satin weave, silk, 13 mm. in salmon colour with 2 white stripes. | ex-Green Closet. Three lengths of green damask from Ham at Colonial Williamsburg, USA, CWF 1967–696,1,2,3. |
| Blue silk damask (a), Light yellow (b) Sea-green and white (c). French/Italian. Style of mid-seventeenth century Used for Queen’s Ante-Chamber and Volury wall-hangings for the Lauderdales; first documented appearance at Ham between 1679 and 1683. | Silk warp, silk weft; fabric width 52.9–53.2 cm., including selvedges. Selvedge on a: Striped, satin weave, silk, 14 mm. in pink colour with 2 white stripes. Selvedge on b: Striped, satin weave, silk, 12 mm. in blue colour with 2 white stripes. Selvedge on c: Striped, satin weave, silk, 12 mm. in pink colour with 2 white stripes. | Queen’s Ante-Chamber Wall-hangings (a) CMS 1139875; Volury Wall hangings (b and c) CMS 1140237. Recently, several very closely related silk damasks in a variety of colours have been found at Knole. ¹ A red damask thought to have been used in England, at Colonial Williamsburg, USA, CWF 1968–167,3. The damask pattern is also extant at Salsta, Sweden. |
| Pink and drab (now faded to golden-yellow) damask ‘Dysart’ pattern (d) Pale gold damask ‘Dysart’ pattern (e) Pale green and ivory ‘Dysart’ pattern (f) Woven for Watts & Co., probably by Warner & Son, Braintree, Essex. Late nineteenth century. | Silk warp, wet-spun linen weft; Fabric width 55–6 cm., including selvedges. Selvedge, 12 mm. in part-satin, part-ribbed hopsack. | Queen’s Antechamber Wall hangings (d) CMS 1139875. Previously on the walls of Green Closet, now in Store (e) CMS 1139518. Previously on the seat furniture in the Green Closet, now in Store (f) CMS 1139454 Another version of the ‘Dysart’ pattern was at Powis Castle. ² See also Hall, p. X. |

¹During recent conservation of the James II bed (Knole, NT) at the National Trust Textile Conservation Studio, repair patches of deep blue-green silk damask were revealed. The pattern is extremely similar to that of the Queen’s Ante-Chamber damask, and identical to the pattern of the Volury wall-hangings. Since then, a further two versions of this pattern have been discovered on chairs at Knole, in crimson and purple. This research is showing how similar these patterns can be, while still exhibiting minor differences in detail.

²During conservation of the velvet curtains from the Oak Drawing Room at Powis Castle (NT) at the May Berkouwer Textile Conservation Studio, another two-tone version of the ‘Dysart’ pattern was encountered in the fragmented remains of the curtain linings. This fabric has a cotton warp, with a jute or hemp weft; the weave structure is coarser and the pattern is larger. The curtains were designed by Bodley for the 4th Earl of Powis during the restoration of Powis Castle around 1904, and it is interesting that the same pattern was favoured again there. The same fabric was also used as a small hanging in St. Peter’s church at Deene in Northamptonshire.

TABLE 6: WEAVE ANALYSIS ‘DYSART’ DAMASK

| PINK AND DRAB DAMASK, QUEEN’S ANTE-CHAMBER | |
|--|---|
| Date/attribution | Nineteenth century, c.1890, woven by Warner’s for Watts & Co., England |
| Type of weave | ‘Damas de Lyon’, two-tone – Damask |
| Warp: | Proportion: 1 single warp Material: silk, pink, faded to golden-yellow on face side of the fabric Pattern step (decoupure): 4 warp ends Thread count: 116 threads/cm |
| Weft: | Proportion: 1 single weft Material: wet spun linen, undyed, z-twist Pattern step: 1 weft shot (1 coup) Thread count: 29–30 threads/cm |
| Internal structure | Background: 8-end satin, warp-faced Design: 3/1 twill, weft faced, Z |
| Pattern repeat | Warp: 67.5 cm Weft: 27.4 cm |
| Fabric width | 55–6 cm |
| Selvedge | Width: approx. 1.2 cm Weave: part 8-end satin, part ribbed hopsack (to catch returning shuttle) Warp in hopsack: using 4× normal warp (17 times in total), 84 threads/cm Weft in hopsack: double |
| Dye analysis | Synthetic dye, no further specification ¹ |
| Weaving method | Unable to say; draw-loom or Jacquard, woven with fly-shuttle (not hand shuttle) |

¹Rogers 2009

NOTES

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- 1679 Ham inventory.
- 1683 Ham inventory.
- Moore, Rowell and Strachey 1995, p. 30.
- Discussion with Clare Browne, Curator in the Textiles, Furniture, Textiles and Fashion Department, the Victoria and Albert Museum.
- Markowsky 1976, pp. 222–3, 249.
- Tuchscherer and Sano 1976, pl. 2.
- Berkouwer and Koppatz 2010.
- Rogers 2009.
- Ondé is a cord which is wrapped around with other cords; in this case there is a silk core wrapped with white floss silk, with another core thread, also wrapped with silk, and metal threads, spiralling around it.
- An altered version is still sold by Watts & Co. today, re-named ‘Holbein’ (see Hall, p. 380). The nineteenth-century fabric was possibly woven by Warner & Son at Braintree in Essex, who supplied fabrics to Watts & Co.; the Dysart weaving cards are known to have existed at Warner’s, Braintree in the 1970s–80s, although they cannot be located at present (communication with David Gazeley of Watts & Co., Richard Humphries of Humphries Weaving Company, and Kate Wigley at the Warner Textile Archive).
- The photograph published in Roundell 1904, vol. II, opposite p. 94, shows the Queen’s Ante-Chamber in 1904 with the new damask in place, but as it is in black and white the colour cannot be recognised.
- Hall 1996.
- Berkouwer and Koppatz 2010a.
- All interpretations are based on

- exhaustive examination, and are careful deductions drawn from our observations. For more detail see our reports in the National Trust Archive.
- The first adhesive treatment was carried out by Ernie Beecher, assisted by Tim Padfield, before 1962, as reported by Sheila Landi in March 2010.
 - Hillyer 1990.
 - Harris 2010.
 - Andrew Bush, NT Paper Conservation Adviser, notes from a brief visit on 30 April 2009.
 - 1679 Ham inventory.
 - The inventory number for the group of textiles is NT 1140237.1–7.
 - Rowell 1996b.
 - Three lengths of green damask at Colonial Williamsburg, USA, Colonial Williamsburg Foundation, CWF 1967–696,1,2,3.
 - Rowell 1996b, p. 23.
 - Roundell 1904, vol. II, opposite p. 141.