JOSEPH MANIGAULT HOUSE MASTER BEDCHAMBER PAINT REVEAL STUDY

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Prepared for the Charleston Museum and the Conservation (HP 810) Course at the Clemson University and College of Charleston Graduate Program in Historic Preservation

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Introduction

This decorative wall paint study was undertaken to provide the Charleston Museum with an analysis of the paint scheme in the master bedchamber of the ca. 1803 Joseph Manigault House to assist in their restoration and interpretation of the space, as well as to fulfill the individual conservation project component of the HP 810 Conservation course in the Clemson University and College of Charleston Graduate Program in Historic Preservation. A recent paint study conducted by conservator Susan Buck at the Joseph Manigault House to identify the original and later paint treatments in the Music Room and second-floor bedchamber provided inconclusive results for the bedchamber. In her report, Buck recommended that "A larger reveal around the chimneybreast, where the best wall paint evidence was found, may yield more information about the original decorative paint." This subsequent paint study followed up on her recommendations to make a larger reveal.

The conservation report produced for the paint study encompasses a literature review on early-nineteenth century decorative paint schemes and overpaint removal techniques. The report also provides a brief historical background and physical description of the Joseph Manigault House. It concludes with a discussion of the methodology, results of the paint study, and recommendations.

Literature Review

Introduction

Paint analysis of the second-floor bedchamber in the ca. 1803 Joseph Manigault House by conservator Susan Buck revealed a possible tromp l'oeil scheme. According to Ina Brosseau Marx, Allen Marx, and Robert Marx, "although all marbling and graining may be thought of as tromp l'oeil (fool the eye), the term is reserved, usually, for illusions of dimensional surfaces with strong highlights and shadows."[1] They assert that "the classic light source comes from the upper left, throwing shadows to the right and below."[2] Cross-sectional analysis conducted by Buck showed an area of yellow paint with a darker dull orange paint on top and to the right, suggesting a tromp l'oeil pattern. While the physical evidence indicates that tromp l'oeil may be present, scholarship shows that there is little precedent for tromp l'oeil in an early-nineteenth century bedchamber. This may be because of a lack of publications and shared research among paint analysts. Scholarship does indicate that a faux wood or marble pattern would be a likely decorative paint scheme. Furthermore, because of a lack of standardized practices in the field of paint analysis, publications on best practices for overpaint removal are limited, making it difficult to draw conclusions for procedures to be used at the Joseph Manigault House.

Tromp L'oeil, Marbling, and Graining

Scholarship provides little insight into the prevalence of tromp l'oeil schemes during the early-nineteenth century. Paint scholar Ian Bristow discussion of tromp l'oeil is mainly confined to seventeenth through mid-eighteenth century British architecture, suggesting that it decreased

[1] Ina Brosseau Marx, Allen Marx, and Robert Marx, *Professional Painted Finishes: A Guide to the Art and Business of Decorative Painting* (New York: Watson-Guptill Publications, 1991), 37.

[2] Ibid.

in popularity when neo-classical Adamaesque architecture became fashionable during the second half of the eighteenth century. Illustrations in Bristow's book *Architectural Colour in British Interiors 1615-1840* show that the houses of English elites continued to have decorative patterns painted on the ceilings, and sometimes the walls during the late-eighteenth and early-nineteenth centuries. It is unclear whether these paint schemes are truly tromp l'oeil, or if they are simply murals, painted patterns, or picked out plasterwork. The illustrations were all taken from prominent rooms used for entertaining, making no reference to tromp l'oeil schemes in bed chambers. The only known precedent for a tromp l'oeil scheme in an early-nineteenth century house in Charleston is the cornice in the stair hall at the ca. 1808 Nathaniel Russell House.

While there is little scholarship on the use of tromp l'oeil and other decorative patterns during the early-nineteenth century, books on architectural painting published during the 1820s show that it continued to be popular. In his 1825 *The Complete Builder's Guide,* Charles Partington stated "ornamental painting embraces the executing of friezes and the decorative parts of architecture in chiara-obscura, or light and shade on walls and ceilings."[3] He recommended painting tromp l'oeil patterns by painting "on slips of paper, or Irish cloth, and pasted up afterwards; some artists also, to facilitate their work, and when the ornament is of a similar pattern all through, do it by what is termed *stinselling.*"[4] Similarly, T. H. Vanherman also recommended stenciling tromp l'oeil patterns in his 1829 book *Every Man His Own House-painter and Colourman.* He described the method for creating a tromp l'oeil effect by first painting the middle tint, followed by the shade tint, then the highlights, before touching up the

[3] Charles Frederick Partington, *The Complete Builder's Guide: Comprehending the Theory and Practice of the Various Branches of Architecture, Bricklaying, Masonry, Carpentry, Joinery, Painting, Plumbing, Etc. Etc* (1825), 578, accessed March 15, 2017, https://play.google.com/store/books/details?id=QDcAAAAAQAAJ&rdid=book-QDcAAAAAQAAJ&rdot=1.

[4] Ibid., 578-579.

light and dark areas.[5] Author Nathaniel Whittock provided the most extensive guidelines for decorative paint schemes including tromp l'oeil in his 1828 book *The Decorative Painter's and Glazer's Guide.* He included instructions on creating Grecian, Roman, Gothic, Egyptian, Arabesque, and Chinese decorative paint schemes. He also provided examples of repetitive decorative patterns and moldings meant to be executed in tromp l'oeil.[6]

Marbling and graining became increasingly popular as decorative wall paints during the late-eighteenth century as the archaeological excavation of Pompeii stimulated interest in classical design. Marbling began to be used on walls "in a way reminiscent of the late seventeenth century. Together with clouded ceilings, this renewed favour for marbling was common in both France and England."[7] Bristow argues "it is clear that by 1801 marbling had re-entered the English architectural repertoire in a significant way."[8] Ackerman's *Designs for Architects* published in 1801 even recommended a plain marble for wall finishes in baths.[9] During the early-nineteenth century, marbling became such a widespread practice that some found it excessive. Author T. H. Vanherman argued that marble graining was "only suitable for columns, pilasters, arches, dados, chimneypieces, and such parts where the appearance of solidity and coolness is desired"[10] in his 1827 book *Every Man His Own House-painter and Colourman.* In contrast, Nathaniel Whittock attested to the popularity for marbling on walls,

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[5] T. H. Vanherman, *Every Man His Own House-painter and Colourman* (1829), 43-44, accessed March 15, 2017, https://books.google.com/books?id=bCFhAAAAcAAJ&lpg=PR1&ots=fqyvq_SUsR&dq=T.H.%20Vanherman%3A%20Every%20Man%20His%20Own%20House-painter%20and%20Colourman&pg=PA40#v=onepage&q=graining&f=false.

[6] Nathaniel Whittock, *The Decorative Painter's and Glazer's Guide* (1828), 119-122, accessed March 15, 2017, https://play.google.com/store/books/details?id=NCoBAAAAQAAJ&rdid=book-NCoBAAAAQAAJ&rdot=1.

[7] Ian C. Bristow, *Architectural Colours in British Interiors 1615-1840* (New Haven and London: Yale University Press, 1996), 173-175.

[8] Ibid., 176.

[9] Ibid.

[10] Vanherman, *Every Man His Own House-painter and Colourman*, 41.

asserting that dove-colored and sienna marbles were suitable for entire rooms, hallways, and passages in his 1828 book *The Decorative Painter's and Glazer's Guide.*[11] The popularity of marbling during the first years of the nineteenth century, as well as the use of brown marbles for walls, suggests that the decorative paint scheme in the Joseph Manigault House may have been a sienna marble based on the white, yellow, and dull orange colors revealed during paint analysis. In his book, Whittock stated that sienna marble was created using a ground "formed with yellow ochre and white, and the pigments called raw and burnt sienna"[12] an orange color.

There is disagreement among scholars about the period in which wood graining became popular in British architecture. According to Bristow, wood graining did not gain popularity as a decorative treatment for walls in English architecture until the 1820s. Prior to the 1820s, wood graining was primarily used in framework.[13] However, Frank Matero cites several examples of early faux-grained walls in Britain as context in his 1983 study "A Rare Example of Early Nineteenth Century Trompe L'oeil Decoration: The Octagon Reception Room at Telfair Mansion, Savannah Georgia." British architect John Soane designed the library at 48 Grosvenor Square in satinwood as early as 1801. He also grained the breakfast parlor and dressing room at his house at Lincoln's Inn Fields in pale oak in 1812 or 1813.[14] Soane may have influenced English architect William Jay, who designed the oak grained reception room at the Telfair Mansion in 1819.[15] The earlier incorporation of faux graining into decorative paint schemes is supported by Vanherman who noted in 1829 that "Graining -or imitation of wood and marbles,

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[11] Whittock, *The Decorative Painter's and Glazer's Guide.*

[12] Ibid., 55.

[13] Bristow, *Architectural Colours in British Interiors,* 180-181.

[14] Frank Matero, "A Rare Example of Early Nineteenth Century Trompe L'oeil Decoration: The Octagon Reception Room at Telfair Mansion, Savannah Georgia," *Bulletin of the Association for Preservation Technology,* 15, no. 3, (1983): 36.

[15] Ibid., 35.

has for some years formed a considerable part of the decorative system, but is now giving way to the plain and simple."[16]

Bristow asserts that the widespread popularity of faux graining in France during the early-twentieth century predated its use in British architectural design.[17] In the 1825 *The Builder's Complete Guide,* author Charles Frederick Partington noted that "at Paris, every species of woodwork used in their houses, as a part of the building, is done in this manner."[18] Wood species imitated by early-nineteenth century painters included oak, mahogany, satinwood, rosewood, air wood, walnut, birds-eye maple, and coral wood. Many of these species were painted using a yellow ground with dull orange or brown graining colors. If the original decorative paint scheme in the Joseph Manigault House bedchamber included faux graining, the Manigaults were likely either influenced by French design or they were among some of the earliest practitioners in the British Atlantic world.

Overpaint Removal

Since there are no standards industry for paint analysis in situ or in the lab, little scholarship exists on the best practices for overpaint removal.[19] Scraping has traditionally been the most common method to create reveals, although paint can also be removed chemically. In her dissertation, Susan Buck cautions "unfortunately the paint scrape method is very misleading as it is almost impossible to scrape down mechanically to reveal cleanly each individual layer of paint […] It is even more problematic if there are complex decorative treatments buried under

[16] Vanherman, *Every Man His Own House-painter and Colourman*, 40.
[17] Bristow, *Architectural Colours in British Interiors,* 180-181.
[18] Partington, *The Complete Builder's Guide,* 578.
[19] Susan Stoner Buck, *The Aiken-Rhett House: A Comparative Architectural Paint Study* (Order No. 3085452), 62, available from ProQuest Dissertations & Theses Global, (305347508), retrieved from https://search-proquest-com.mutex.gmu.edu/docview/305347508?accountid=1454.

multiple layers of overpaints, such as ephemeral stenciled or freehand designs in distemper."[20] In contrast, conservator Dorothy Krotzer argues "field investigation, including removal of overpaint to expose earlier decorative painting schemes, is an important part of many finishes-research projects. While some decorative painting can be identified when using cross-section analysis, a full understanding of its original appearance cannot be gained unless it is exposed in situ."[21]

In her dissertation, Buck used a series of chemical strippers to remove layers of overpaint before removing the final layers using a scalpel.[22] Since the original paint at the Joseph Manigault house is a fragile distemper, Buck suggested using thick aromatic solvent gels and emulsions such as a stiff Pemulen gel with an aromatic solvent. Still, she argued that the mechanical removal of the overpaint using a scalpel would be the safest method.[23] In her dissertation, she cited a mechanical overpaint removal technique from a guidebook by the National Trust for Historic Preservation. The guidebook instructed "make a wide V-cut in the surface, scrape and carefully sand the cut until it is three or four inches wide. You will then have all the paint layers, and the dirt layers between them, exposed and ready for examination with a hand magnifier."[24]

Conclusions

In conclusion, period publications show that tromp l'oeil decorative schemes continued to be popular through the early-nineteenth century, although there is limited scholarship on the

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[20] Ibid., 71-72.

[21] Dorothy S. Krotzer, "Architectural Finishes: Research and Analysis," *Association for Preservation Technology,* 39, no. 2/3 (2008): 3.

[22] Buck, *The Aiken-Rhett House: A Comparative Architectural Paint Study,* 447.

[23] Susan Buck, email message to author, March 18, 2017.

[24] Judith L. Kitchen, Caring for Your Old House: Respectful Rehabilitation, A Guide for Owners and Residents (Washington: Preservation Press, 1991): 156, quoted in Buck, *The Aiken-Rhett House: A Comparative Architectural Paint Study,* 71.

application of tromp l'oeil in American houses of the period. Scholarship and period publications indicate that marbling and faux graining were widely used in houses ranging from public entertaining spaces to dressing rooms and baths. Sources indicate that marbling was more broadly accepted in British architectural design around 1801, several decades earlier than graining. Finally, manual overpaint removal using a scalpel may produce inaccurate results, but is necessary to reveal the decorative pattern.

History of the Joseph Manigault House

Joseph Manigault acquired the land located at the corner of Meeting Street and John Street on which he would build later his house in 1802. The land was a part of the subdivision Manigault's uncle John Wragg had subdivided to create the Wraggborough neighborhood. Wragg died intestate in 1796, causing the land to be divided among his relatives. Manigault inherited one lot and purchased another from his sister Anne in 1802 to create the present lot.

Joseph Manigault's brother Gabriel designed the house to be a statement of taste and wealth in 1803. Scottish architect Robert Adam who had introduced neoclassicism to British architecture in the late-eighteenth century influenced Gabriel Manigault's designs. Gabriel was a gentleman architect who became familiar with Adamesque architecture when he travelled to London. He also possessed a large architectural library and had met Charles Bulfinch, who introduced Adamesque architecture to the United States. Adamesque architecture resonated with wealthy Americans like the Manigault family because they saw its elegance, simplicity, and classicism as a reflection of their republican values and a break with Georgian architecture popular during the colonial period. The architecture of the Joseph Manigault House reflected Gabriel Manigault's command of Adamesque design principles.

The house became Joseph Manigault's town house, or primary residence. His family resided there during the winter social season, using the house for parties. They also lived in the house or at a resort on Sullivan's Island during the summer to escape the unhealthy conditions on their rice plantations. Joseph Manigault resided in the house until his death in 1843. His son Gabriel retained the property until 1852, when he sold it to carriage manufacturer George N. Reynolds, Jr. Reynolds sold the house in 1864 to the president of the Charleston Street Railway, John S. Riggs. The Riggs family owned the house until they sold it to the Charleston Motor Sales

Realty Company in 1920.

Threatened by demolition, the Society for the Preservation of Old Dwellings (SPOD) focused on its preservation. The Society's founder Susan Pringle Frost bought the house, conveying it to her relative Nell McColl Pringle in 1922. Pringle used the house as a tenement to pay the mortgage. The house was vacant and in disrepair by 1928, leading Pringle and SPOD to do preservation work on the house. The house was opened to the public in 1930, but Pringle lost the house in 1933 because she was unable to pay the mortgage during the Great Depression. A donation by Princess Pignatelli enabled the Charleston Museum to purchase the house. The museum leased the house to the United Service Organizations during World War II. The house was reopened to the public in 1949. It became a National Historic Landmark in 1974.[25]

[25] Christine White, "Joseph Manigault House Tour Guide Manuscript" (Charleston Museum, 1992).

Physical Description

The Joseph Manigault House is a four-story, center hall, double pile building constructed in the Adam, or Federal, style. It is built entirely in Flemish bond brick. The south side features a two-story, four-columned piazza, while the north side has a plain entrance at the second floor. The east and north elevations have semi-circular projections, while the west elevation has a two-story semi-circular piazza. The windows are six-over-six sliding sash except for the third-floor fanlight above the south piazza and the Palladian window in the north stair hall. There are also blind windows on the north elevation to mask the service staircase and dressing room. The door on the north elevation is also Palladian. The doors on the south elevation are six-paneled with sidelights. The building has a hipped roof clad in slate with two interior chimneys flanking the central hall. The roofs above the curved projections are conical.

Figure 1 The south elevation of the Joseph Manigault House.

Like other town houses built by Charleston's elite during the early-nineteenth century, the main entertaining spaces in the Joseph Manigault House are located on the second floor to take advantage of natural ventilation. Similarly, the master bedchamber is on the same floor as the entertaining spaces as it served both private and public functions. Charlotte Drayton Manigault would have likely used the master bedchamber as a place to serve tea to other women of her social status. The room was also used to serve food during especially large gatherings. The public nature of the room is reflected in its architectural treatment. The fireplace with its ornate mantelpiece is flanked by doors, one of them fake, to maintain the room's perfect symmetry. The bedchamber also has an ornate cornice with a stenciled pattern in the frieze. The wainscoting below the chair rail and the trim would have been painted a cream color. The doors are faux grained in satinwood. A semi-circular room adjoins the bedchamber to the east. It was likely a dressing room built for Charlotte as dressing rooms were becoming popular among the elite in England during the early-nineteenth century.

Figure 2 The master bedchamber with the current orange paint.

The walls of the bedchamber are currently painted orange with flecks of brown splattered on. There is no historical precedent or physical evidence for this paint color and technique. There are approximately fourteen layers of paint on the wall, with a skim coat of gypsum plaster over the fourth generation of paint. After the original layer of paint, the wall was painted varying shades of blue-green three times.

Methodology

The northwest corner of the master bedchamber was selected for the reveal because it did not obstruct tours. The reveal was created in the corner directly above the chair rail in an effort to locate a decorative border pattern. The reveal measured approximately one foot by one foot four-and-a-half inches upon its completion.

Figure 3 The location of the reveal.

A variety of methods were for the removal of the overpaint since there are no standard

best practices for creating reveals as discussed in the literature review. The overpaint removal was first completed using a No.1 X-Acto knife with a No. 11 blade following Buck's recommendations for the careful manual paint removal. Initial probes found that a skim coat of hard gypsum plaster had been applied to the wall during the late-nineteenth or early-twentieth centuries, encapsulating the earliest paint layers. The plaster and its overpaint were removed using a sharp one inch chisel. Afterwards, a small two-inch square section of the original wall paint was revealed using the X-Acto knife.

Figure 4 The gypsum plaster skim coat.

The manual overpaint removal proved to be problematic because the brittle decorative paint patterns were more tightly bonded to the overpaint than to the original ground paint they had been applied to, causing them to be scraped off with the overpaint. Several chemical paint strippers were tested to try to remove the overpaint without disturbing the decorative paint scheme. The tests were conducted over one-inch square areas using a cotton swab to carefully

apply the strippers. Mineral spirits did not successfully remove the overpaint, while denatured alcohol also removed the water-soluble original distemper paints despite its careful application. CitruStrip proved to be the most successful because it softened the overpaint enough for its removal, but its gel-like texture did not cause the original paints to run or be removed with the overpaint. However, some of the green overpaint remained in places where the stripper did not penetrate for a long enough period of time, but it was feared that another application might soften the original paint. The CitruStrip was applied over the entire section of wall using an artist's paintbrush for greater control.

Figure 5 The reveal during the manual scraping process.

Figure 6 CitruStrip applied to the overpaint.

Results and Recommendations

The paint study found that the ground paint was a light golden brown. There was a decorative paint pattern above the chair rail and running vertically in the corners in a darker reddish brown. There are also cream areas, as well as a blue glaze. While some of the forms painted in the reddish brown appear to be geometric, the overall design appears to be organic with no discernable pattern. Because of the apparent lack of an overall pattern and the variety of shades of gold, reddish brown, and cream, it is also possible that the wall was marbled with a decorative blue glaze pattern.

Figure 7 The completed paint exposure. Note the different shades of golden brown, darker brown, and cream.

Figure 8 Possible border pattern in brown and blue.

Several factors should be considered in the interpretation of the results. The exposed paint colors may not be completely accurate as they were exposed to paint stripper and light. It was also difficult to remove all the green overpaint. The natural aging of the pigments should also be taken into consideration. Upon close visual inspection, the colors did not appear to change when they were exposed by stripper as opposed to manual scraping. It may be best to determine the original colors using a cross section, although the colors may also not be accurate in photomicrographs. The analysis of the paints' chemical components through spectroscopy at a laboratory, such as the Warren Lasch Conservation Center, may also help in determining the original color and paint composition. In addition, some colors or parts of the design may have been accidentally removed by the stripper or when the wall surface was prepared for subsequent paint campaigns. Visually, the CitruStrip did not appear to remove either the reddish brown or

blue paints. However, there were places where it was difficult to remove the overpaint without damaging a soft yellow paint that may have also been a part of the decorative pattern.

The Charleston Museum has two main options in continuing the paint analysis and restoration of the bedchamber. The museum could opt to move forward and paint the entire bedchamber the golden-brown ground color. The other option is undertaking additional paint research since the decorative pattern has still not been determined. An even larger reveal should be created in the current location, as well as possibly below the cornice, around the chimney, and near the windows to better understand the paint scheme. Creating reveals is inherently destructive, a factor that should be weighed since it could impede future research. If a larger paint study is undertaken, an even broader range of chemical strippers should be tested to see if there is one that does a better job of removing the green overpaint without disturbing the decorative paints.

Conclusion

The paint study confirmed Susan Buck's belief that the master bedchamber had a decorative paint scheme. However, there was no tromp l'oeil pattern in the section of wall paint that was investigated. It is still possible that there were tromp l'oeil schemes in other parts of the room. The decorative paint revealed lacks a distinctive pattern, suggesting that the scheme was either freehanded in an organic fashion, part of a much larger pattern, or possibly a faux marble due to the varied shades of gold, brown, and cream. Each of these decorative patterns and techniques were popular during the early-nineteenth century.

Should it choose to, the results enable the Charleston Museum to paint the room in the historically-accurate golden ground color, although it should be done with the understanding that the gold varied in shade and a more accurate color match would most likely come from paint that has not been exposed to a chemical stripper. To undertake a more accurate but expensive restoration, additional reveals need to be created to gain a better understanding of the decorative paint scheme so it can be recreated over the golden ground paint.

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