Object Studies

Painted and Stained Glass

What Is This Object?

A signed but undated portrait medallion of painted and stained glass.

Octagonal in shape, it measures 78.8 cm high by 63.8 cm wide (31" by 25¼"). The object is constructed of colored and painted glass joined with cames; some of the joins in the portrait are the result of later repairs and not original to the creation of the image.

The subject is the artist, William Peckitt, in formal dress and wig, shown with his right hand gesturing in front of his chest. An oil painting of Peckitt from about 1780 depicts him in a similar pose, and was probably the model for this glass painting. (Self-portrait is therefore a slightly misleading term, as there is no indication that Peckitt created the oil painting.)

Both the oil portrait and the glass portrait medallion show a half-length image of Peckitt. The oil portrait places him in a dark background while in Peckitt's own version he is posed in front of a wall. Peckitt wears a white shirt, stock, and waistcoat and a dark red cloak. His wig is white-gray, his face and hands are flesh-toned. The image of Peckitt has a border of blue glass decorated with a painted-on floral design. The whole has a border of glass that is stained yellow, and painted to resemble a gilt frame with an acathanus patterned decoration.

Both the oil and glass versions of the portrait are in the collection of the York Museums Trust (York City Art Gallery).

How Is Color Created?

Peckitt used stained glass and pot-colored glass to create the larger areas of color in this images: the yellow and blue of the borders, the red-brown of his cloak.[1] The golden-yellow color of the frame, for example is the result of a silver stain. In this coloring technique, a piece of glass is coated with a silver powder (or other coloring material). As Pierre La Vieil noted in his treatise on glasspainting, firing leaves a stain on the glass that is yellow-red range, but the silver does not adhere.[2]

The silver could be prepared in a solution and precipitation technique similar to that used for purple of Cassius , but Peckitt's manuscript describes a different preparation method. Peckitt's instructions call for dipping silver leaf in sulfur and

then calcining it. These two steps are repeated until the silver becomes brittle. It is then ground with ocher, which acts as an extender, and gum arabic.[3] Peckitt indicated proportions of these substances in his manuscript, but noted that the exact quantities required will depend on the quality of the materials and the color desired. Peckitt was also known to apply his stains to both sides of the glass support, for greater depth of color.

To create the yellow stain on the glass, this silver-ocher-gum arabic coloring material is ground in water until it is the consistency of cream. The solution is then applied to the reverse of the glass plate. Peckitt, in his treatise, noted the importance of an even application and slow drying of the mixture; this ensures a consistent color. The depth of color of the stain is a function of the kiln temperature, the proportion of silver to ocher, and the number of times the process is repeated.

Peckitt's manuscript collection of recipes includes formulas to paint or stain both flint glass and crown glass. For this yellow stain, he noted that the slightly blue tint of crown glass makes the stain a better color.[4]

While Peckitt's manuscript includes several recipes for stains or glass-painting colors, there are no instructions for making pot colors.[5] Details of Peckitt's processes for that type of colored glass are therefore less certain. In general, the preparation technique called for the addition of coloring materials—metal oxides—to the molten glass mixture before molding or blowing or otherwise shaping: Peckitt's description of "A deep Blue Colour upon Glass" may be similar to the technique used to create the blue border here.[6] If so, his process was based on a mixture of zaffer and niter. The two were ground together and then added slowly into a hot crucible. When melted and mixed, the hot contents were poured into a basin of cold water. This caused the liquid to harden and, according to Peckitt, it also extracted harmful salts. The zaffer-niter compound was dried and powdered: a quantity of this mixture was added to a crucible ("pot") of molten glass to create the desired blue color.

Details such as the acanthus pattern on the yellow glass, the flowers on the blue, the buttons, the gathers and wrinkles that add dimension to the portrait and the background were added to the colored glass using colors applied in a manner similar to that of enameling or ceramic-painting. Peckitt was especially proficient in the stippling technique he used to depict the skin tones and highlights on the costume.

Our comprehension of Peckitt's manuscript treatise on glass painting and staining is enhanced by the existence of objects that were probably colored using the techniques he describes in that work. We can see similarities between the creation of color on glass and the creation of other vitreous colors in the

requirements for the substrate and for the coloring materials. As Peckitt's instructions make clear, keeping the glass level is a problem in creating the substrate, as it was for clay bodies and metal supports. Maintaining a smooth and even surface remains a problem as layers of glass stain are added, as it was for clay bodies and metal supports.

The composition of the substrate glass layer was therefore significant. It had to have a melting temperature higher than the coloring materials added later, to create the stain or details. For the elements of this portrait it was not a difficult accommodation, as the melting point of those later mixtures could be controlled by the use of a flux. According to his treatise, Peckitt worked the coloring materials in two ways. Some were mixed with the flux, painted on the glass, and then fired. For other colors, the flux was treated as a mordant, spread over the surface to be painted, which is then fired. The image is then painted or pounced onto the surface and whole is fired again. This second technique allowed a more wash-like buildup of the colored surface, creating designs of greater subtlety.

Once preparation of each colored element was completed, the whole portrait was assembled.

How Is the Object Used?

A glass portrait, or any other design worked in glass, must catch the light if it is to be seen. Decorative glass was often set into windows, or framed to hang in front of a window; occasionally decorative glass patterns were used as covers on lamps. In these instances, the light would illuminate the pattern, as the cover gave a colored cast to the light.

J. T. Brighton has suggested that it was Peckitt who re-established, after several centuries of false starts, the art of glass portraiture in England.[7] Peckitt's commission book suggests that portraiture was a part of his trade nearly from its beginnings, and he continued to produce them for about thirty years. His initial subjects were such historic figures as Newton, Galen, or Alfred the Great; this suggests Peckitt's interest in same consumers as those attracted to Wedgwood's colored medallions: the portraits or scenes executed in white clay relief on a colored ground so popular from mid-century. By the 1760s however, Peckitt had abandoned portraits of historic figures for those of contemporary men—including portraits of his patrons.[10]

Few examples of Peckitt's large output of glass portraits and other glass paintings remain today. This is probably owing to both the fragile nature of the materials and to the expected use. Inset into a window, a glass decoration was more likely to be destroyed when the area was redecorated.

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Note 1: J. T. Brighton, "William Peckitt, 1731–95, and Portraiture on Glass," *Preview (York City Art Gallery Bulletin)* 34, no. 125 (January 1984): 5.

Note 2: Pierre Le Vieil, *L'Art de la peinture sur verre et de la vitrerie* (Paris, 1774), 108–13.

Note 3: William Peckitt, *The Principals [sic] of Introduction into That Rare but Fine and Elegant Art of Painting and Staining of Glass* (1793), York Museums Trust (York Art Gallery) York, England, MS; R. G. Newton, J. T. Brighton and J. R. Taylor, "An Interpretation of Peckitt's Eighteenth-Century Treatise on Making Glasses and the Stains for Them," *Glass Technology* 30 (1989): 33–38; R. G. Newton and J. R. Taylor, "Peckitt's Eighteenth-Century Treatise: Staining Glass with Red Tones," *Glass Technology* 31 (April 1990): 69–71.

Note 4: Peckitt, *The Principals of . . . Painting and Staining of Glass,* f.6.

Note 5: Peckitt, *The Principals of . . . Painting and Staining of Glass.*

Note 6: Peckitt, *The Principals of . . . Painting and Staining of Glass,* f.7v.

Note 7: Brighton, "William Peckitt and Portraiture on Glass," 3–11.

Note 8: J. T. Brighton, "William Peckitt's Commission Book," *The Fifty Fourth Volume of the Walpole Society* (1988): 334–453.

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