

## Multi-Color Printing in the 18th and 19th Centuries

Printing in more than one color is often referred to as either multicolor or polychrome printing, even if only two colors are involved. In England, examples are known that date from the earliest period of ceramic printing.

At the Battersea factory, which was in operation from 1753-56, it was used for the decoration of both enamels and white saltglaze stoneware, although surviving examples are now very rare. A few enamel medals are known decorated with a print of the arms of the Anti-Gallican Society [1]. This is in two colors: the greater part of the arms is printed in pink but the two headed eagle is in black. This effect was achieved using the glue bat process and a single engraved copper plate, with different parts of the oil transfer pattern being dusted with different enamel colors. A similar but simpler process was used to decorate a few extant white saltglaze stoneware plates. These bear a number of different prints encompassing a variety of colors but each print involves only a single color. [2].

The Vauxhall porcelain factory also used polychrome printing from about 1755-60. The technique used was peculiar to the factory, whereby different colors were applied to individual small elements of the bat print [3]. This made the process more laborious, as the dusting of such items as small leaves and flower heads with different colors must have been time consuming. Moreover, hand painted enamels were subsequently added to the printed outlines. It is no surprise that the Vauxhall technique of polychrome printing was not followed up by any other factory, as the cost of printing in more than one color must have been difficult to justify, particularly when it was invariably enhanced by painted enamels than sometimes obscured the printing.

Printing from different copper plates, each charged with a different color, as practised at Battersea on salt glaze plates was carried out towards the end of the eighteenth century by Ralph Wedgwood of Burslem but using underglaze colors and paper transfer. Later it was used by Enoch Wood and Sons [4], Ridgway, Adams and other factories to produce a variety of colorful patterns with the center of the piece and the border printed in two contrasting colors.

Another technique, somewhat analogous to that employed at Battersea and Vauxhall, in that it involved a single print to which more than one color was applied, was used in the 1830s at Davenport [5]. Here different parts of the engraved copper plate had two or three colors applied to them and the print was transferred to the ware by a paper tissue using the hot-press method.

This technique was superseded by a further development in multicolor printing that involved the engraving of a series of copper plates, one for each color. In the perfected process each plate had two registration dots engraved on it. When matched up, these ensured that the paper pulls from each copper plate transferred the successive colors onto the ware in perfect alignment. In this way, four or five plates were capable of rendering an image in full color. The person generally credited with introducing this process is Jesse Austin at F& R Pratt & Co [6]. However, W Smith & Co of Stockton-on-Tees were also using the process at much the same time as F& R Pratt and both of them were preceded by Enoch Wood, although his earlier process sometimes resulted in misaligned colors.



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