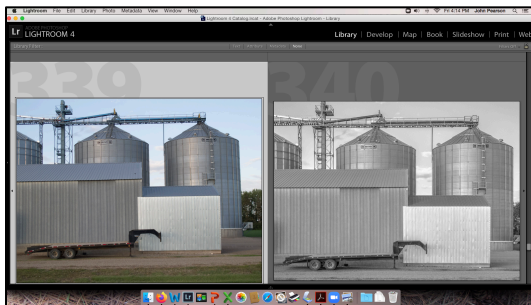


Polymer Photogravure Printmaking Technique

John Pearson

Polymer photogravure—or polymergravure as it's often called—is a contemporary version of traditional copperplate photogravure printmaking. Both approaches involve the transfer of a photographic image to an intaglio plate for printing on a press. Polymer photogravure materials were developed for commercial printing purposes and were later adapted for fine-art printmaking. The medium provides a rich, distinctive surface quality that is unmatched by other photography printing techniques. Below is a description of the steps involved.



Producing the film positive

Each image begins as a digital color photograph. The image is converted to black-and-white and modified to optimize its balance of lights and darks. A positive of the finished image is then inkjet-printed onto a sheet of transparent film.

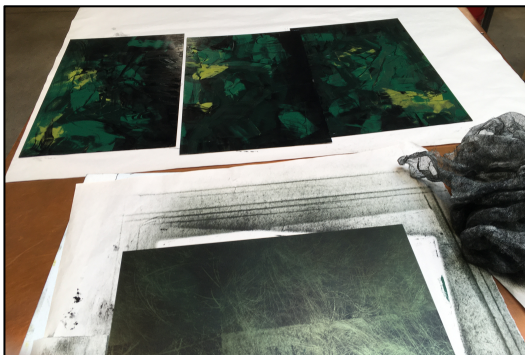
Left: Original color shot of Big Bins next to optimized version ready for film output .



Exposing the plate

The film positive is sealed against a steel-backed, polymer-coated plate that is sensitive to ultraviolet light. A timed exposure of ultraviolet light transfers the image onto the plate by hardening the polymer where the light shines through the film. An additional exposure of an overall gray aquatint screen assures an even tone in dark areas. The exposed plate is then gently rinsed in plain water. Polymer that wasn't exposed gets rinsed away leaving a surface of microscopic pits that will hold

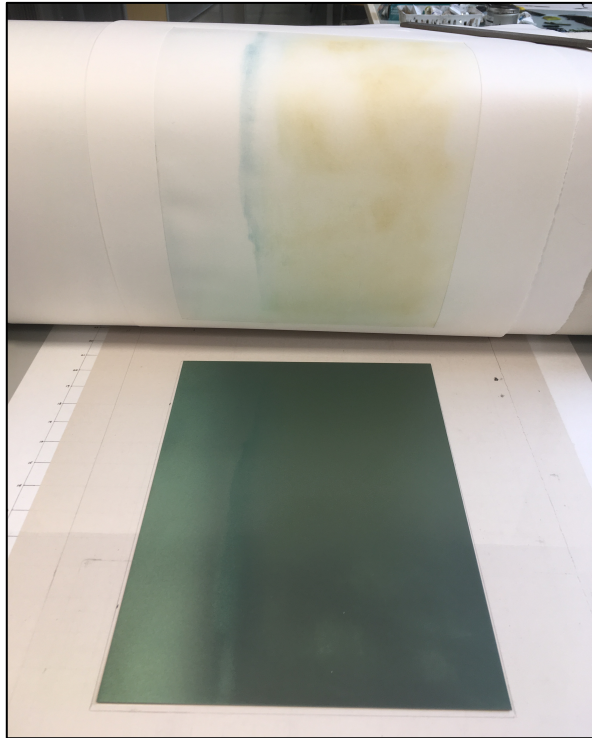
ink during the printing process; shallow pits print light tones; deeper pits print dark tones. An overall exposure to UV light finishes this step. *Left: Highpoint Center for Printmaking's darkroom with UV exposure box in foreground and plate-rinsing sink in background.*



Printing the plate

The cured polymer plate is printed like a traditional intaglio copper etching plate. A skim of ink is applied over the whole surface. The ink is then wiped away with tarlatan, a piece of starched cheesecloth. The wiping action removes ink from the highlights of the image but leaves ink in the more pitted areas. The wiped plate is placed on the bed of the press and dampened art paper is laid over it. Under the high pressure of the press, the

dampened paper is pushed against the plate to receive the inked image. The finished print is dried and flattened. Last, the print is titled, edition-numbered, and signed. *Preceding page: Wiping the first of four plates of Grass Land.*



Adding Color

I use two methods to add color to the print.

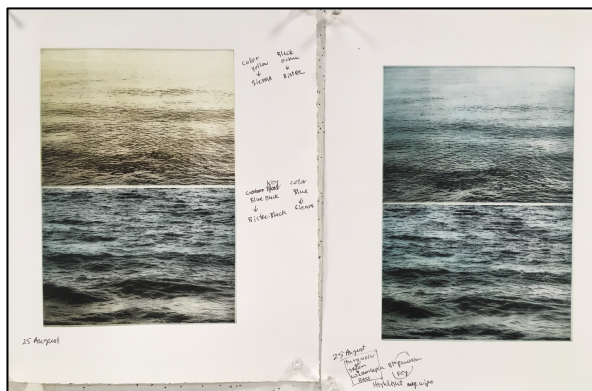
1. Multi-plate method: Two plates of the same size are made using the procedure described above. One plate, usually printed in black, carries the image detail. The second plate, created from the same original image, bears colored ink for select areas. The paper is run through the press twice, first to receive the colored ink, and then again to receive the black ink. Careful alignment of each plate on the press bed in turn is required for a clean image.

2. Single-plate method: Various colors of ink are applied to different areas of the plate. The printmaker's traditional term for this technique is "à la poupée." The areas are carefully wiped to prevent too much mixing of adjacent colors. I often combine this method with the multi-plate technique.



Top left: The image from the color plate has been printed on the paper; the black plate will then be printed to complete the image. I typically use a light touch on the color plate and allow the black plate to dominate.

Middle left: A la poupée application of ink to the three plates of Vanishing Point.



Bottom left: Experimentation is an important part of the process. Plate exposure times, ink colors, wiping techniques, and press settings all influence the expressive qualities of the piece as shown by these test proofs of Mille Lacs Waters.