



Sylvie Covey, French Hat, 2012, polymer photo-etching on copper, 5 x 6 inches (12.7 x 15.2 cm).

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Photo-Etching and Photogravure

Printmaking began crossing paths with photography soon after photography's invention, and the mediums eventually merged, in the later nineteenth century, in the great fine-art technique of photogravure. Monochrome photogravure's continuous tones produce photographic intaglio prints of extraordinary quality, but the complexity of the photogravure plate-making process, requiring etchings in several baths of different strengths of ferric chloride, has mostly made the medium accessible only to professional print shops. Nowadays, however, new materials and techniques allow anyone to bring photography and printmaking together, with exciting results. Polymer photo-etching, toner transfer photo-etching, and polymer photogravure are the most successful current techniques.

Polymer Photo-Etching

Polymer photo-etching combines photography with intaglio printmaking. It requires the making of a positive halftone transparency image. A metal plate is laminated with a light-sensitive polymer emulsion film such as Puretch, Z*Acryl, or ImagOn. The transparency is placed on the laminated plate and exposed to UV light. The UV light hardens the emulsion in the non-image areas, preventing them from developing. When the plate is placed in a bath of diluted soda ash, only the image areas, formed of collections of dots from the halftone, soften and are developed. The plate is then etched in an acid bath, and the dots that are bitten into the plate retain the ink.