CYANOTYPE PRINTING

Speaker Notes by

Tim Anderson: June 2025

The Cyanotype printing process was discovered by Sir John Hershel in 1842. He had some collaboration with Dr. Alfred Smee on the chemistry of the process. His protégé, Anna Atkins, produced the first photographic book in 1843 of botanical images using the cyanotype process.

<u>The Cyanotype Print</u>

Cyanotype is a contact printing process. The print is the same size as the negative. The image will be made up of various shades of blue, black-blue and white (the paper base).

The Paper

Almost any good quality watercolor paper can be used but it must be able to withstand a prolonged time of being in water. I have had good success using Fabrino Studio Hot Pressed watercolor paper, Aqua Bee Mixed Media and Arches Hot Pressed Watercolor paper. I'm a fan of the smoothness of hot pressed watercolor papers but cold pressed papers can give amazing textures.

The Emulsion

The emulsion consists of two separate parts (Part A and Part B). Stored separately in brown bottles as they can last a very long time. For an 8x10 print you use about 2 ml of emulsion total. This means use 1 ml of Part A and 1 ml of Part B.

Part A:

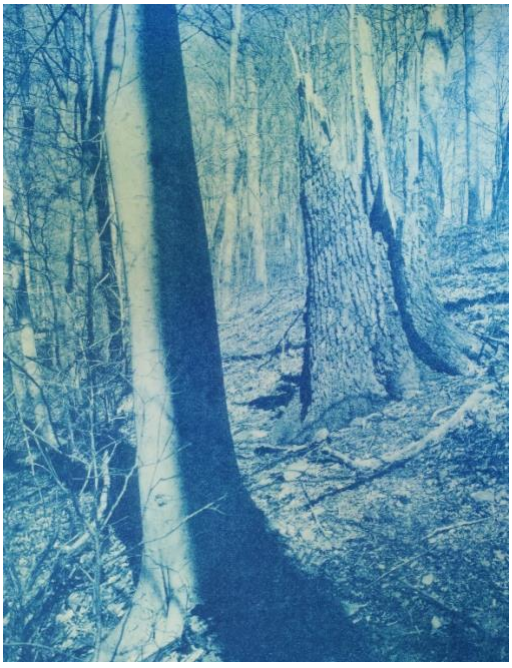
50 g ferric ammonium citrate

200 ml distilled water

Part B:

20 g potassium ferricyanide

20 ml distilled water



SENSITIZER

At this point wear rubber gloves!

Combine equal parts of the A and B solutions. A teaspoon of each solution should be enough for five 8x10 prints.

4X5: use 0.4 ml (use 0.2 ml of Part A and 0.2 ml of Part B)

8x10: use 1.6 ml (use 0.8 ml of Part A and 0.8 ml of Part B)

11x14: use 3.08 ml (use 1.504 ml of Part A and 1.504 ml of Part B)

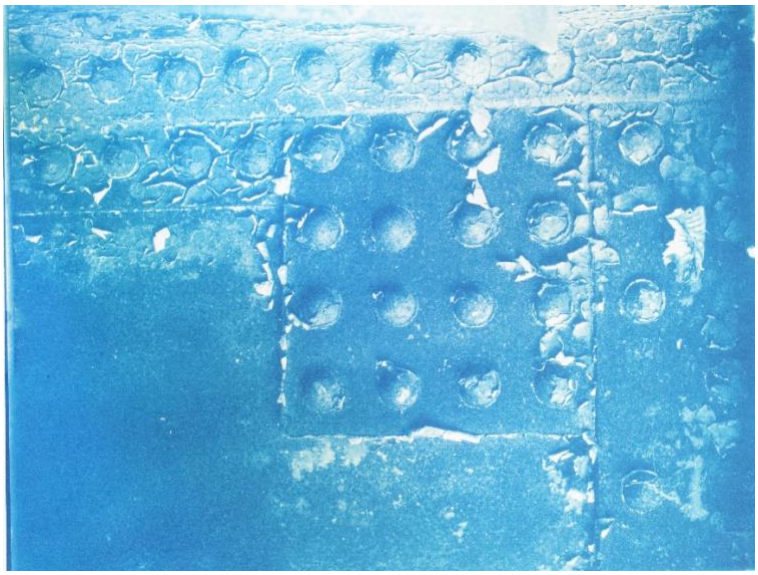
Coating Tips

First note on the back of your watercolor paper the type of paper, which negative you are using, and your name if you are in a group. Coating can be done in a dim room, but no UV light. Some florescent lights may produce UV light so avoid coating under florescent lights.

Place your paper on a hard surface. I use a glass sheet.

Again wear GLOVES and an apron is a good idea to protect your clothing.

Dip a foam brush into the sensitizer and coat the paper back and forth and up and down until you see an even chartreuse color.



The coating must be completely dry before you can proceed (a hair dryer helps).

Air drying may take up to 45 minutes depending on the humidity of the room.

Exposure

Once you've sandwiched your coated paper and negative into a hinged printing frame, place the assembly into a UV printing box. Exposures will vary from 5 to 20 minutes. Periodically check the print by opening the hinged printing frame. When the print looks right, remove from the hinged printing frame. Note on the back of the print your printing time. If you don't have a hinged printing frame, an oversized glass sheet and several binder clips can be used. You will still need to check the print without losing the registry of the paper and negative.

Processing

Prepare 3 trays in an area that can get wet and an area for a final wash.

Tray 1: Contains water but is made slightly acidic. A quart of water with 1/8 cup of Stop bath or vinegar should be sufficient. Slightly agitate for 2 minutes .

Tray 2: Contains only water. Slightly agitate for another 2 minutes

Tray 3: Contains water and a splash of hydrogen peroxide (3% solution) (2 caps full) for around 30 seconds . I've heard students gasp at how much the blues intensify with the hydrogen peroxide bath!

Final Wash: Final washing is done in either in a print washer or in a bathroom shower for 10 minutes.

Line dry, mount, display and enjoy!!!

Reference Books

Jill Enfield's guide to Photographic Alternate Processes by Jill Enfield

The Book of Alternative Photographic Processes by Christopher James

Cyanotype Toning by Annette Golaz