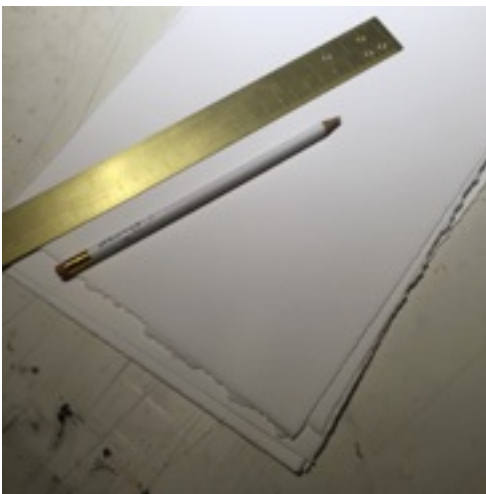




William Henry Fox Talbot's original salted silver nitrate paper evolved between 1834 and 1839. Talbot used smooth writing paper washed in a weak solution of common salt, dried, then coated with a solution of silver nitrate, resulting in light-sensitive silver chloride. Once dry, the paper could be printed out in strong sunlight. The resulting image of metallic silver was fixed in a strong solution of salt.



Talbot refined the process, and Sir John Herschel suggested sodium thiosulphate (hypo) as a fixing agent. Salted paper was the basis for Talbot's Calotype process, which used silver nitrate and gallic acid to develop up a latent image in the exposed paper, and is the foundation of modern silver-based photography.

Materials for salt printing

Good quality art paper, such as Arches Platine
Blotting Paper

Sodium Chloride (otherwise known as salt)

Silver Nitrate

Citric Acid

Sodium Thiosulphate

Distilled Water 1L (widely available)

Trays

Measuring Jug and Graduates

Mixing Paddle

Syringe

Coating Rod or Sponge Brush



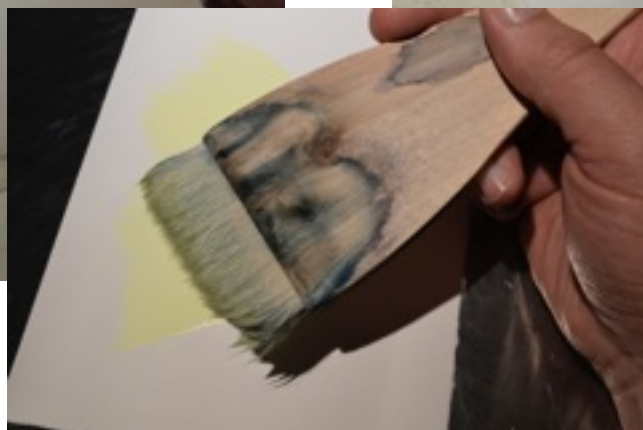
Note: rinse utensils, etc. with distilled water before use



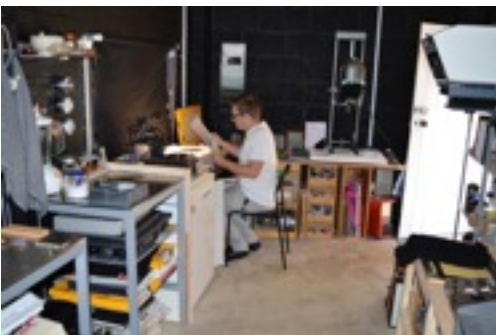
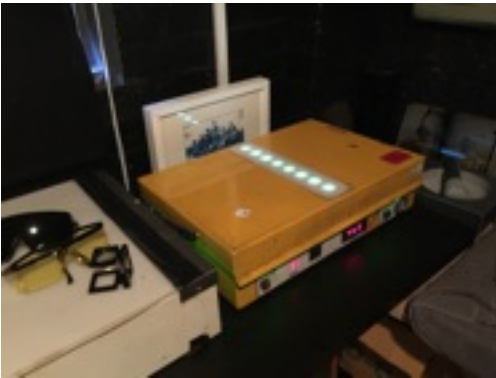
Method

Mix a 1.8% Salting Solution. This is 1.8g Sodium Chloride to 100ml Purified Water, multiply accordingly for larger quantities (eg: 9g Sodium Chloride to 500ml purified water to make 500ml of working solution).

Salt the paper by soaking in the salting solution for about 2 minutes. Be sure to disperse any air bubbles that may form on the surface. Remove the paper from the Salting Solution, blot with photographic blotting paper and allow to dry.



The next part of the process must be done in very subdued tungsten lighting, ideally in a darkroom with a safelight, as the solution will be light sensitive. Mix up your Sensitising Solution using 3g Silver Nitrate to 20ml of distilled water, also mix up a 20% Citric Acid solution (2g Citric Acid to 10ml distilled water). Just before coating add 0.3ml of the Citric Acid solution to 3ml of the Silver Nitrate solution. Using a syringe, make a line of sensitising solution along the top of the paper then use the Coating Rod to evenly spread the solution across the whole sheet. Continue adding solution and coating in different directions until the paper is completely covered. A Sponge Brush can also be used, this will give a more textured and uneven quality to the print, but effect can work well depending on the image. The paper should be left to dry in the dark.



Once dry the negative can be placed on the paper and a contact print made by inspection in sunlight or under an ultra-violet lamp, until the image is 1/2 stop over-exposed..



The print will lighten significantly in the wash and fix, so at this stage the print should be darker than desired. This will take some experimenting, especially in sunlight, to find the ideal exposure times. Next wash the print in running water until the milky silver compound has completely dispersed (2-20 minutes, depending on paper weight).



Have a 5% Sodium Thiosulphate (Hypo) solution ready (5g Sodium Thiosulphate to 100m water) for fixing. Fix the print for 5-30 minutes (depending on the paper, as above). Wash in running water for 15 to 30 minutes, again, depending on the paper weight and allow to dry.



Et Voila! An awesome Gems Academy / PhonarNation Salt Print!!





Text: Silverprint, London
Photographs: Alternative Darkroom & PhonarNation