

Sensitising paper 13-18°C. Liquid solution. 40/50 degree humidity, wrap in foil and freezer storage. Cleaning is important. Alcohol solutions. Copperplate. Chalk paste. Covers the plate. Even cover. To avoid oxidation. Gas torch burns the cover. Getting rid of any residue of grease. Warmed from beneath, cool, remove the chalk. Positive film/positive on multi grade paper. Degrease solution. To make sure that oxidation from burn is removed: 25% alcohol solution wipe. Cotton gloves all the way, when handling the sensitised paper. Vacuum frame. Ultraviolet light source. Exposure. Positive pigment paper and exposed. Positive removed after exposure. The 25% solution. Pigment paper starts flattening out. Flip it so that the flat side is up. The copy on the plate. Squeegee it dry. 99% alcohol to speed its drying process and then wiped dry. Plate is put aside to rest. After rest 5 minute 99% solution to remove paper. Hot water. As hot as fingers can stand. Carefully remove paper, from corner with knife. Plate developed in hot water. Change the water several times till you can see the image clearly. Finished developed plate in water. 50% alcohol for 4 minutes. 99% for 5 minutes. Plate into whirler slow centrifuge. 5 minutes. Put aside to rest till the next day. Magic marker to remove bubbles. Ruler to attach contact paper on back of the plate. Excess cut with a knife. Masking tape along the edges. Packing tape. Handles. Moving from one etching bath to the other. Hydrometer to measure the strength of the acid. 5 trays with ferry chloride. Different *baumé*. Caustic soda stops the action of the acid right away. 45 *baumé*, through the gelatine. 40-60 minutes. Finer screen shorter, cruder longer. Then rinsed with water. Contact paper and tape removed. Care. Sensitive to scratching. Hot water for cleaning. *Twinkle* or polishing solution, to remove gelatine residue. Wipe dry. Then with alcohol remove the water quickly and prevents oxidation. *Brasso*. Idea of what the image will look like. Magnifying glass. Corrections into the plate. Roulette. Dry point needle lines: marks for excess copper to be cut away. Bevel the edge, so that it doesn't cut. Rounding off the edges slightly. Scraper to remove any residue. Polish so that they will not take ink. Oil to avoid print. Now ready to print. Paper in lukewarm water for about 1 hour. Wrap in plastic. 2-4 days to make it receptive. Must be wrapped well in plastic. Felt and pressure adjusted. Plate to be printed (colouring of some of *True Lasse*). Magnesium, control the viscosity of the ink. Little bit of Vaseline. Easier to release from the plate, and produce a full bodied print. Different fabrics to bring out the highlights in the plate. Ink evenly. Entire plate is covered. Wiping with different tarlatan (fabric). Medium stiff. Repeat. Fresh side of the tarlatan and continue wiping. Cheese cloth and continue to wipe: denser material. Image starts to appear. Wipe till all the surface ink is gone and the image is clearly visible. Dense lining material, and bring up the highlights of the plate. Clean the edges with a lighter fuel. Print paper unpacked from plastic. Blot the paper using a roll of paper towels. Put unto the template on print surface. Close up the paper. Felt and lock it underneath the roller. Felt and paper locked. Lifted up. Then the plate is fixed to the template. Bring down the paper. Spray some water on the back side (especially if the weather is hot). Felt down. Slow speed. Even-slow-speed, crank it through if not electrical. Now lifts off the felt. Now remove the paper carefully. Paper tape, wet: put it up on the wall to dry. Finished black and white print. Now passing unto colour. One plate for each colour. Registration and printing is crucial, since one uses more than one plate. Ink should be tacky. Evenly on the glass slab. Wipe as before. A special set for each colour. Stiffest tarlatan and then the softer and denser. Just the weight of the hand. Finish off by cleaning the edges and set the plate aside. First orange. Then magenta. Less tacky, lower viscosity. It sticks to the plate more, makes it a little harder to wipe. Wiping as before. Clean the edges and set the plate aside. Then pass to cyan. Third plate. Even less tacky/lower viscosity than magenta. Wiping is the same. Easier to wipe. Remove tone. Otherwise it will affect the other colours. Cleaning the edges. Set the plate aside. Last tone is black fourth and last printed plate. Less tacky than cyan. Lowest viscosity. Easies to wipe. Wants to leave a tone on the plate. Removed to avoid affecting other colours in the finished print. (Viscosity determines where the colour sticks). Plates have different kinds of information, and makes up the final print. Blotting the paper with paper towels as before. Template, registration, hooked with the felt. Starting with the yellow (here, orange) plate. Perfectly lined up. Lift up the felt. Locked into the roller before moving it up. Remove the plate. Magenta plate perfectly registered to avoid blur. Spray water, lay down the felts. Locked in under the roller. Remove the plate. Then Cyan and Black and the same procedure, repeated. Final look with the black. Now the paper must go past the roller. At this point the print becomes sticky with 4 colours. Care is required. Now lay it on the bed for examination. Printed up o the wall and left to dry. 2-3 days so that the ink can settle. When process ends the print is taped on the wall!

Personal notes during first screening of Jan Petterson's [video](#) of his stepwise introduction to the photogravure technique. The transcription is made as accurately as possible. Precision is sought in the covering the entire process in time unto the surface of a single sheet, thereby seeking a level of consistency with the photogravure technique in this aspect.

The reason why we are narrowing down from printmaking expanded field to a specific print-making technique, is that precision is within the photogravure technique both in the wet-room (plate) and the dry-room (print). And that, in this requirement, lies the key to enhancement/augmentation of the original that lies: **a)** in a continuous grey tone; **b)** colourist output similar to painting.

Within the framework of what always works and what never works in photogravure there is a realm of slim possibilities: it is a process which is *complex* in the sense of being sensitive to *initial conditions*. That is, minute variations of first inputs determines a significant variation in the final outputs. The originality of the photogravure technique is that initial conditions *spread out*.

That is, the performance of each of the steps in the process—from beginning to the end—is a minute element with a significant impact, in this sense complex, that adds to the previous ones. Which means that from the sensitisation of a gelatine paper for the transfer to a copper plate by etching, to the inking of the plate for print on a moist paper, there are layers of initial conditions.

For this reason, a linear idea of the process—though adequate for didactic purposes—may differ from the sensorial experience of it, in which an artistic form of knowledge is stockpiled in perception (from where it may evolve in leaps). Here we are not talking about a single cause-effect development, but rather what might be determined as indeed a multi-layered *causal surface*.

Here it will be useful to distinguish *between* accuracy *and* precision: attention to the edges of the plate—that need to be rounded and oiled—and placing the edges of the plate into the template for colour-printing (when more than one plate is used), is needed for precision in the delivery: the finished print. Likewise the hunt for grease spots and bubbles on the surface yields precision.

Which means that, to a novice, the process can be carried out accurately down to the minutest detail, and still not deliver precision in the output. Which means that it is the precision of the output that *assigns* the accuracy of the operations: the concrete meaning of term ‘aesthetico-epistemic operation’ here lies in the way accuracy can be learned through *repeated* assignments.

Perhaps it can be compared to what a marksman learns on a shooting-range: for all s/he knows the aim and shooting is accurate—and carried out minutely according to the learned instructions—it becomes assigned when the target is inspected close up. When shooting-and-assignment is repeated, and minute adjustments are learned, precision will gradually improve. This is the craft.

When a desired precision is acquired artistic propositions may emerge from decisions in the process that are holistic inasmuch as they involve the entire surface: for instance *drying* (the plate in the wet room) and *wetting* (the paper in the dry room). Similarly, the choice of *paper* and *inking*. These choices are artistic in the sense that they reflect a sensitivity to the context.

The *continuous grey scale*—or, the continuous pigment scale—of the photogravure technique, and the *continuous causal surface* (which it anticipated that the mastery of the technique will yield), makes its practice a crossroads between a narrowly defined craft, and a backdrop for a parliamentary openness to a broader outlook on artistic choices, concerns and outcomes.