Lithography Handout
Deletion and Addition Procedures

ERASING

Erasing and deletion are slightly different when using lithographic drawing materials on stone or plate. Since drawing materials vary in grease content there are different tactics to be considered. Moreover, remembering when erasures were made and what has been erased is required for successful printing.

Erasing relatively greaseless areas - on stone

An artist can attack a lithographic stone with an eraser and get a response. The same artist might also attack a computer key board with an eraser with equally satisfying results. An eraser consists of rubber and pumice mixed. It was devised to abrade material from paper. The rubber will smear whatever grease is present sideways and separate grease from pigment.

To successfully erase materials of low grease content (Korn's #5, Stones #5 or higher, Prismacolor) an eraser shield is helpful. Thin metal such as is used in shields can be cut by hand to form new shapes. Hold the eraser shield firmly against the stone and rub vigorously. The eraser shield breaks off small amounts of eraser with each stroke. This exposes fresh rubber and prevents grease from being rubbed (burnished) into the stone.

Chemical erasing of greasier materials

The artist should ask him or herself if a more effective solution can be made by waiting until the stone is "in ink." Greasier materials affect the stone chemically to a greater depth. It is important not to exacerbate the problem by rubbing the grease. By masking the area with an adhesive film it is possible to remove grease and pigment with solvents. Lacquer thinner or acetone leave little residue but should not be used repeatedly. Not only are solvents toxic, but they liquify trace amounts of grease which percolate further into the stone than visible materials. Drawing done over such areas will vary in darkness.

Erasing greasier material with loose abrasive

An alternative to solvents is abrasion. It is messy but it can be done so as to leave little evidence. The process works best with water soluble materials. After masking with pressure sensitive film the area is rubbed with loose abrasive and water. The "slurry" will remove minute amounts of both drawing material and stone. The usual abrasive is 220 grit carborundum but usually effects can be had through use of abrasives ranging from rotten stone (polish) to #50 grit carborundum. Everything from fingertips to favorite flat pebbles has been used to rub the abrasive.

"Sandblasting"

Please do not try this without elaborate preparation. Special "air erasers" have been marketed by Pasche. They blast a tiny stream of carborundum. The result can be beautiful, but the grit goes everywhere! Crisp edges require masking.

Erasing by filling in

No, this is not a joke. It is easier to remove a solid than a tonal area chemically. Therefore, it may be easier (especially on plate) to fill in an area containing a mistake ... with the intention of redrawing the area after further processing.

DELETIONS

For purposes of this handout deletions differ from erasers in that they are done while the image is in ink. The deleted area may be a mistake, a flaw in the printing surface, or a selected area that is removed for creative purposes - as in color reduction printing.

Deletions involve removing grease and applying acidified gum to establish non-printing (desensitized) areas. In order to re-draw the stone or plate, it must be counter-etched in preparation for new drawing materials.

Masking film and deletion fluid

Masking films must be tough adhesive backed, but removable. Some films leave small amounts of adhesive behind so experimentation is helpful with new films. Films may be run through the press or burnished by hand. Good masking films can be cut with precision that allows a pencil line to be divided in half.

Deletion fluid
1 oz gum arabic
1 oz lacquer thinner
20 drops phosphoric acid

Deletion fluid - process

Deletion fluid is mixed in small containers. The acid/gum/lacquer thinner mixture will separate quickly so it must be shaken with each use. Small amounts may be applied through openings in masking film. They should be rubbed in with a brush and removed with paper towels until the deletion is visibly complete.

Some "commercial" plate cleaners are deletion fluid. One of the most effective is Varn Corporations "true blue" plate cleaner. This reacts very much like the recipe given above but probably contains detergents and other

materials. Other plate cleaners do not contain solvents and will corrode but not delete an image.

Two-step deletions

Rather than mixing solvents and gum, it is possible to use solvents followed by gum. As mentioned above, solids are easier to remove so it may be worthwhile to cover an area intended for deletion with a soluble substance (tusche, shellac, liquitex) After washing away all vestiges of grease, any area to be deleted may be painted with acidified gum. Phosphoric is generally milder than nitric acid, but either will remove grease residue and establish clean "non-painting" areas.

Soft - deletions

Instead of acidified gum the artist may choose water-soluble/gum based water-color pencils or crayons. Carden de arche crayons have been used for this delicate process. Once the stone has been processed and is "in ink" it should be given a suitable stabilizing etch to reinforce these deletions.

Final considerations

All of the procedures used for deletion alter the surface of the stone (less true for plates) and smooth the grain toward a polished surface. Smooth polished surfaces dry quicker than rough surfaces and may fill-in quickly if caution is not used during printing.

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