The 'plate' or 'matrix' (with ink residue)

The print

paper lithography

how it works:
A photocopy is used to create this print. Paper lithography uses the same principles of traditional lithography; the plate is treated with a gum arabic solution, making some areas of the photocopy hydrophylic (water-loving) and other areas hydrophobic (water-averting). Because the toner is greasy, it will bond with the oil-based (greasy) ink while being repelled in the open (white) areas of the photocopy.

materials:

Liquid Gum Arabic - 14° Baume
Photocopy (not a laser copy), 2-3 copies
Printmaking inks (relief)
#00 Burnt Plate Oil
Scissors (or x-acto knife with self-healing mat)
Vegetable Oil -- for clean-up (optional)

2 Sponges
2 Bowls
Brayer (soft rubber)
Water
Ink knives
Inking slab
instructions:

With paper lithography, you have to be mindful that your plate (matrix) is a piece of paper; treat it gently and with care

1) Trim photocopy to size

2) Smear a small amount of gum arabic (dime or quarter - sized amount, depending on the size of your copy) onto your clean inking slab

3) Lay your photocopy face up in the gummed area, ‘sticking’ it to the slab

4) Sponge (dab, do not rub) a 50/50 water/gum arabic solution onto your photocopy; leave to sit while you prepare your ink, but do not allow the copy to dry out

5) Prepare your ink by folding #00 plate oil* into your ink, making it less viscous (Stand Oil or other oils may be substituted in a pinch)

6) Using a soft brayer, roll out your ink onto the slab (look for a fine stipple texture and listen for a soft static sound)

7) With a damp sponge (water only), gently brush out from the center of your copy, working in different directions convincing the gum out from under your copy

8) Ink up your copy

9) Dampen your sponge and wring it out over your copy -- you will see the ink in the open areas of your copy lift up; sop up the water by gently wiping the sponge across the surface of your copy, working from open areas to inked areas

10) Use a razor blade or your fingernail to pry up a corner of your copy

11) Print by placing inked copy face down on paper* and using a fair amount of pressure. Cover with a clean piece of newsprint so that the gum does not go onto your felts.

*Note: some people choose to put their paper litho plate onto a plexiglass (monoprinting) plate because they desire a plate edge and/or it is easier to handle

troubleshooting:

**Photocopy is lifting up from the ink slab (or is tearing)**

-- Your ink may be too tacky or thick -- 1) add more plate oil to modify your ink and 2) apply your ink in thinner layers to your copy instead of trying to completely ink your copy in 1-2 passes

-- Move your brayer more slowly -- a slow brayer lays down ink, while a fast brayer will pick up ink (and, in this case, your paper matrix)

-- Your paper copy may have gotten too wet and, therefore, is tearing
Areas of your image are filling in
-- Your copy may have dried out or you did not let your copy sit in the 1/2 & 1/2 solution long enough
-- Using the 1/2 & 1/2 gum/water solution, blot your image and let it stand a while longer

Areas of your image are filling in (continued)
-- Your copy may not have enough contrast -- recopy so that the image has a stronger representation of blacks and whites

You aren’t getting as much detail as you would like
-- Use thinner applications of ink
-- With your inked copy attached to a plexiglass plate, carefully run it under a small stream of water at the sink; this should help to sharpen up areas that have filled in

Your ink well (or color on your ink slab) is splotchy
-- Gum arabic is getting into your ink 1) Scrape up your ink and roll your brayer onto a scrap piece of paper/newsprint (this should remove the gum on your brayer and on the ink slab), 2) Remix the color, 3) When you recharge your brayer in between inking your plate, make sure you: A) hear the static sound and B) feel the tension between the ink and the brayer as you charge (it should not feel ‘slippery’)

The white areas of my print are stained with color
-- Certain colors tend to bleed (reds especially) and will stain the white areas. You may choose to 1) cut your copy down to its edges or 2) control this as an artistic element or 3) understand that some ink brands tend to bleed more than others -- experiment to mitigate this effect.
suggestions/options:

• Use the copy machine as an art tool: make copies of copies, enlarge/reduce, lighten, darken, collage & recopy, move your image while it is being scanned

• Once your copy is inked up, you may use some monoprinting techniques, such as: sgraffito, reductive & additive approaches, stencils

• Tear and collage your inked copy

• Selectively ink areas of your copy

• Roll on a thinly laid base color and then reduce other inks in your palette with #00 oil, brush onto the surface to blend colors -- in effect, you are making a combination paper lithograph/monoprint image

• Experiment with printing on 3-D surfaces, canvases, walls....

• Layer multiple paper litho plates using registration methods

• If you are using text, you must reverse/reflect your image by: A) using Photoshop or another software or B) print the text onto a transparency and then flip your transparency on the copy machine to get a reversal of your image

• To achieve painterly or drawn marks, simply photocopy brush strokes or drawings

• To create a stronger plate (for small editioning), copy onto a piece of cardstock or heavier weight paper -- just let the gum/water mixture sit a bit longer on your plate
gallery:

[Image 1: Paper litho layered with monoprinting]

[Image 2: Paper litho layered with monoprinting, bottom panel silkscreen]

[Image 3: Paper litho layered with monoprinting and relief]

[Image 4: Paper litho layered with monoprinting and relief]

resources:

Graphic Chemical
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