Prints from the Unrocked Rock: The Curious Art of Mezzo-Litho

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Overview:
Velvety blacks and subtle tonal gradations are prized in the intaglio mezzotint process. But the method requires a prolonged, painstaking preparation of the copper before the actual image making can proceed. In the early 1800s, experiments in the infancy of lithography sought mezzotint-like effects from Bavarian limestone. Over time, the processes attempted have disappeared into obscurity.

As a long-time mezzotint artist and stone lithography devotee, I became curious about importing the particulars of one printmaking realm into another. The result is what I call "Mezzo-Litho."

Historical Precedents for mezzo-litho
Adolph von Menzel (mid-nineteenth century), Sir Hubert Herkomer (turn of the century), and Robert Riggs (mid-twentieth century).

The key difference between mezzo-litho and other lithographs. In a typical lithograph, the image dots reside on the peaks of the grained stone landscape, and the pits or valleys are processed to accept water and repel ink. In mezzo-litho, *it is the opposite*. The grease-bearing areas reside in the pits and valleys, and the peaks, which have been shaved down, are processed to accept water but repel ink.

A further distinction between *manière noire* and mezzo-litho: "shaven, not graven."
When I speak of mezzo-litho, I am referring to a way of doing subtractive work on a stone that is comparable to how a mezzotint artist systematically scrapes a copper plate's rocked burr. The lithographic equivalent uses scrapers to shear off the tops of the grained stone peaks.

The broad category of *manière noire*, on the other hand, often involves freely scratching or needling into a previously drawn area. Many nineteenth-century lithographs are handled in this fashion. Eugène Delacroix, Henri Fantin-Latour, and Odilon Redon all come to mind.

Stone selection and preparation. Yellow stones are suitable, as are gray stones. Choose a stone without graining scratches, obvious veins or chalk marks, all of which will show in the final image. A normal surface grit of 220 or so works well. A coarser grain like 100 grit might seem ideal during scraping because you can better feel the tool edge moving over the toothed surface. However, printing is problematic because the pits are deeper and harder to print. You are essentially asking your planographic litho press to print intaglio.

Gum the margins of your intended image area with a slightly acidified gum solution.

The best flat. You want a thin, even expanse that is dark enough to clearly see the effects of your "drawing." Yet this flat must also allow the free wielding of tools without excessive resistance. Of the various ways to establish a flat in lithography, the best for mezzo-litho is greasy crayon pushed into a warmed stone.

Crayon preparation. Melt a few 00 Korn's crayons, then stir in a small quantity of tallow so that your proportion is 80% Korn's to 20% tallow. Mix thoroughly with a metal fork. Transfer the melted mixture to a glass slab in small piles with a metal painting knife. When these cool you can scrape them off and knead them into rough cylindrical crayons.

Heating the stone. Although it is possible to rub the crayon onto a room temperature stone, the material melts and glides on so much more quickly and evenly if the stone has been heated. For small stones, use a reflector with a heat lamp. The stone will reach a surface temperature of about 100° after about ninety minutes under the lamp (which is 10-12 inches above the stone). For larger stones, I rest the stone on a piece of matboard atop a room- temperature hotplate. My hotplate is set at 150°, but I let the stone warm up to only about 100° before shutting off the heat and rubbing in the crayon.

Rubbing in. Stroke the crayon across the warmed stone until you have an even, solid black coverage with no specks of stone showing. Remove the stone from the heat and wait about ten minutes.

Buffing the flat. Now begin "wiping" the stone with a medium-gray intaglio tarlatan. Use a systematic series of rows of tight circular motions, going both vertical and horizontal directions. Wait until the stone temperature has dropped to about 80° before doing another round of tarlatan wiping. The idea, just like printing an intaglio plate, is to remove the bulk of the material but not to "overwipe." Too thin a final coating will not withstand the hot etches used in this process. When the stone has cooled to room temperature an hour or so later, finish with a quick whisking with a cheesecloth pad.

The scraper as primary tool. The go-to tool is the standard three-sided intaglio scraper. You can work into tight spaces with the mini-versions of the triangular scraper.

Keep it sharp! It is amazing how quickly the edge dulls. Each edge is good for maybe 30 seconds or so of stroking before you need to switch to a new edge. It would be efficient to have multiple scrapers sharpened and lined up ready to use, which was the usual practice with 18-century mezzotint artists.

My sharpening station is a setup of multiple grits of wet/dry carborundum abrasive papers spray-mounted to small glass slabs in a sequence of 800 /1200 /1500 grit.

Be careful not to get any stray liquids on the image area, because the Korn's 00 crayon base is water-soluble and will dissolve.

Flexible double-edged razor blades are also very useful, although they are harder to control precisely and call for surprisingly hot etching. This was a favorite tool of the American lithographer Adolf Dehn..

Other subtractive tools. To provide visual spice to what could be an overbearing prevalence of scraping, supplement with **roulette** work. But beware of "losing at the roulette table." If

those wheels catch and drag, you will have unsightly scratches that cannot be repaired. Use powdered graphite or WD 40 to lubricate between the drum and the shaft, and spin the drum manually before actually getting onto the stone. Avoid rolling the roulettes for extended periods of time, as the heating up of the tool increases the chances of catching and dragging.

Steel-nibbed pens for pen and ink work, such as Hunt Speedball mapping points, crow quill points, etc. The tool tip splays into two points when pressure is applied, and you get two narrow lines with every stroke.

Scratchboard tools offer interesting possibilities, especially the multi-wire liners.

First Etch. It is imperative that the image receive a hot etch to keep the shorn peaks of the grain from coming back and taking ink during printing. Assuming a good dark gray flat on the stone, a room temperature of about 70°, and a relative humidity of at least 50%, mix up a hot etch of 30 drops nitric per ounce of gum. This should come out to about a 1.2 pH or so. Stir the etch very thoroughly, put a layer of pure gum over the image area, and then dump the etch out into the margins. Quickly pull the tide of etch across the image in one continuous motion. Keep the etch moving constantly with your hands, going in different directions. After two minutes or more, cool the etch by dumping pure gum over the image area, after which you buff down the gum coat as usual.

Caution: if the etch foams vigorously as soon as it hits the stone, it is too strong. Warning: if you are working in a dry environment (25% relative humidity) all bets are off. You will need to make the etch much weaker to avoid burning out your black background. (I would love to hear if anybody has ever worked up an etch chart based on different relative humidity levels.)

Washout and Roll Up. Let the stone rest overnight. Re-gum, wash out, and roll up. Take your time in all regards. Start with a very lean slab of 50:50 Crayon Black to Shop Mix. You need a leather inking roller in good condition for this method, which departs from the planographic character of typical lithographic printing. Since you are printing the grease areas *below* the stone surface, you need the nap and sensitivity of a leather roller to get ink down into these areas. Plan on bringing the image up very slowly, with more ink charges and rolls than usual. It is better to start with little ink and roll more times than get too dark too soon with a rich ink.

The second etch can be 15 drops instead of 30 if the image came up well, assuming similar studio temperature and humidity conditions as for the first etch. Once again, let the stone rest overnight.

A third etch is recommended for image editioning stability. For images with tonal subtleties like mezzo-litho, this is a good standard operating procedure.

Printing pointers Use all your wiles and guiles, starting with refrigerated, gummed, and magged sponging water. Your ink will probably need to be a little greasier in order to fully print the black background, especially on rag paper. Consider a mixture of 2/3 shop mix to 1/3 crayon. And be ready to go greasier if necessary. With this richer ink, keep the slab somewhat

lean and compensate with more ink charges. It is important that the paper be double- or triple-calendared, unless you plan to print on paper that has been damp-boxed overnight.

Stop to loose gum the image every 10 prints or so if you are going for a large edition.

Summary Thoughts The single most important secret to success: "Be the tortoise" in every step and aspect of this method. Take your time and do not be in a hurry. Let time pass between the various stages of the process. Whenever possible, let the stone sit overnight before the next action. Let the dark flat sit for at least a day or two before starting tool work. Let the stone sit at least a day or two between every stage of etching, rolling up, etc. The less of a hurry you are in, the greater the likelihood of success.

Selected Bibliography

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"There is nothing new under the sun." Ecclesiastes 1:9