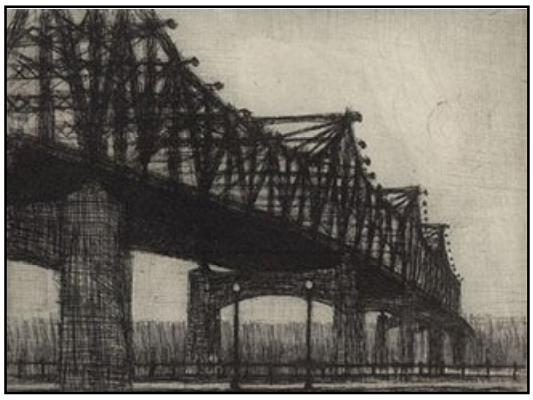
Larry Welo
The Etching Process

The first etchings were made several centuries ago. In the mid-1400s, metal craftsmen would carve designs on their work. As a way of keeping a record of their engraved designs, ink would be applied to these engravings and the designs would be transferred onto paper. With time and the introduction of the press, this “printing” developed into a new art form where the image printed onto the paper became the art object.

Traditionally, etchings are made on copper plates, although other metals may be used as well. A thin protective coating is applied to the plate. This is called the ground. A stylus-like tool (usually made of steel) with a sharp point is used to draw through the ground, exposing the metal beneath. When the plate is placed in an acid bath, a reaction occurs. The exposed metal is eaten away by the acid. Wherever a line was scratched through the ground, a groove is created. After a period of time in the acid, the plate is removed and the ground is cleaned off with a solvent. The plate is now ready for printing and is covered with a heavy, black ink. The ink is wiped off of the plate’s surface, leaving ink only in the etched areas beneath the surface of the plate. The inked plate is laid on the bed of the etching press with a dampened sheet of paper laid on top. When the wheel of the press is turned, the plate and paper move between large steel rollers. A great amount of pressure from the steel rollers forces the paper into the contours of the plate, where the ink is transferred to the paper.

Much of etching is a studio process. The etching press is made of steel and is quite heavy. Also, the chemicals require a great deal of care in handling. One of the beauties of the medium, however, is that the copper plates that I use are fairly portable. I am able to take them into the field and work directly from the location. I love to do this. The chemistry that occurs in translating something from three dimensions onto the flat copper etching plate is like no other. There is a bond that occurs between mind, hand, and place. It is a magical union.



◄ "The pressure was on and the clock was running.... and it was starting to get dark. I had a lot of information that I needed to put down in a limited time. The pressure was exhilarating. I think the energy of being there and working on the etching comes through in the finished print."

Larry Welo
from an interview with Theo Jean Kenyon
for the Peoria Journal Star

Over the centuries, etching has evolved. Artists have discovered other ways of creating the incised, etched areas on metal plates. All of these techniques, whether with or without chemicals, have come to be known under the broader term **intaglio**. (Thus intaglio is the more accurate term for the medium I work in.)

The following are intaglio techniques that I use frequently:

Aquatint: I cover the plate with a powdered rosin. The plate is suspended and a torch is used to heat the plate from below, melting the rosin into tiny droplets and fusing them to the plate. When placed in the acid bath, the chemical etches the plate around each of these droplets.

Soft ground: Mixing grease with hard ground creates a ground which will not dry on the plate (as opposed to hard ground, which does dry). By laying a sheet of paper over the soft ground, it is possible for me to draw on the paper. The pressure from the drawing tool will cause the paper to pull the ground off of the plate wherever a mark is made on the paper. Soft ground may also be used to push a texture through the ground (cloth for example) and etch that texture into the plate.

Sugar lift: India ink is mixed with sugar. The plate is drawn upon with the ink. Hard ground is applied over the drawing, and when the plate is submerged in a water bath, the water is able to get at the sugar under the hard ground, causing the ground to lift off wherever the plate was drawn on with the ink.

Drypoint: Any work that is done to the plate without the use of acid is drypoint by my own definition. Typically, if the ungrounded plate is drawn on with the needle, a groove is created. The metal that is displaced by the needle creates a furrow. When printed, this line will have a unique characteristic. The engraving action of a burin on the plate, the removal of etched areas with a scraper, the action of a roulette's wheel on the plate are all types of drypoint.

Color etchings: Typically, I will use more than one plate to create a color etching. Each plate is etched (registration considerations are important), and then printed onto the paper with different colors of ink. Color may also be applied to the plate with a roller and printed in relief using a stencil to mask areas where the color should not be applied.

Chine collé: Chine collé means collage. I will cut a piece (or pieces) of paper into a shape, apply glue to it, and adhere it to my etching as it is being pulled through the press. It is a process that is difficult to master, but can yield interesting and sometimes colorful results.

Monoprinting: Printing an etching (inking the plate and wiping the ink off) sounds straightforward, but it can be a critical part of the art form. The inked plate may be wiped selectively, leaving various intensities of value on the plate. By leaving ink on the plate, it is possible to create etchings where the etched areas interplay with ink that is left on the surface.

There is no other process like etching. The possibilities are endless. Each technique mentioned above has its own character. They are, in a way, like instruments in an orchestra, able to perform solo or together as an ensemble.

I do not have a set formula for making my etchings. It is important that the process always be interesting and new. I am always thinking of new approaches for creating a composition. Some would say that it is a difficult process, because what you see when working on an etching is different from what you get when you pull your first print (the copper plate with the hard ground on it is visually quite different from the image that is finally printed). For me, that is part of the excitement. Complete control is not entirely possible. One must work within the medium and its unique characteristics.