Photogravure is one of the first multiple-producing photographic processes. A photographic image is etched into a copper plate and then printed on an intaglio press. Four-colour photogravure uses four plates, cyan, magenta, yellow and key-line black. When they are printed together, a full colour image is achieved.

An Exploration of Four-colour Photogravure Images for Book Works  

by Marlene MacCallum

I started making book works in 1997 using black and white photogravure prints, emphasizing the book form as a way to create image sequences and structural relationships. In September 2007 I began a new research project with David Morrish and Pierre LeBlanc entitled Creating The Visual Book Through The Integration Of The Diverse Technologies Of Photogravure And Digital Processes. This collaborative project has given me the opportunity to learn the four-colour photogravure process. I was drawn to photogravure because it combines the subtle tonalities of mezzotint with high-resolution photographic information.

For the last two decades I have been using a film camera to observe and record incongruities within domestic architecture. In 2006, after completing The Townsite House Project, I felt as though I had exhausted this process. The first step of my new research was to search out digital tools that would be distinctly different from working with a film camera. I have basic Photoshop skills, but I am not drawn to its limitless manipulative possibilities. After some experimentation, I found the unique properties of the digital scanner to have the greatest potential. In Camera: Lens was created in response to the surprising contrast between a film camera’s record of a situation and the digital scanner’s point of view. I compare and contrast the colour digital scanner images of two lenses with the black and white film camera photogravures. Images of scans of pages from my notebook give the viewer clues about the abstract imagery of the book. The glass covers give the piece a strong physical presence.

The final version of In Camera: Lens is printed on Tyvek coated for inkjet printing. This material offers flexibility, strength, and has the unique property that it prints photogravures beautifully without dampening. Normally, in order to print a photogravure plate, the paper must be soaked which results in expansion and distortion. Combining media is easier when the soaking step is eliminated.
The second step of the project was learning to make four-colour separations for photogravure. Four-colour CMYK separation is the common method of commercial colour printing. My interest, however, is in the way a source image is transformed into four different plates that can then be recombined to create a new version of the image as seen in Quadrifid. I found great potential in the printing possibilities offered by colour-separation methods. The challenges were first to learn how to adjust the digital process in Photoshop to suit photogravure, and second to achieve precise registration of the four colour plates. Using multiple-plate printing when creating book works has many implications for binding and I have found that it has led me to develop simpler structures.

In Camera: Lens, left hand pages are digital inkjet prints, left spread right hand page is photogravure over digital inkjet, right spread right hand page is photogravure, 19.4 x 30.2 cm (page spread), 2009.

PHOTO | MARLENE MACCALLUM

Quadrifid, view from above of the accordion and folio sections, hand bound book, digital and photogravure prints, 29.2 x 28.5 x 1 cm (closed), 28.5 x 27.7 cm (page), 2009.

PHOTO | DAVID MORRISH

mechanical light sources. The image seen on the right side of the upper page spread was the result. From this point on, I continued to create and gather images that followed the theme of the framed ear or earlike objects. Instead of restricting myself to the use of the digital scanner, the images have been created using many methods: hand drawn text, a pinhole camera, a digital scanner, and a digital camera. The initial images were generated through different means but are all printed as photogravures. As a result, the difference between the image sources is reduced and the eerie similarities are enhanced, creating visual harmony. This book work is a good example of how this project has increased my focus on the image to construct a narrative with text being treated as a visual component as seen in the right hand image of the lower page spread.

My current experimentation has resulted in the development of new figurative imagery. I continue to be fascinated by sensory paradoxes, but now from the perspective of the recording device. My recent book works have become simpler in structure but provide a more heightened tactile experience through the variety of the printed surfaces. It is my aim with this project to maintain the integrity of the traditional photogravure process, which is a combination of historical printmaking with photographic methods. By introducing the use of digital tools as another option, the process evolves and expands upon its potential for print and book artists.

Trompe l'Oreille, two spreads from work in progress. Top spread shows black and white photogravure from pinhole negative (left) and four-colour photogravure from digital scan (right). Bottom spread shows two-colour photogravure from digital photograph (left) and black and white photogravure from digital scan (right), each image is 20 x 20 cm, 2010.

PHOTO | MARLENE MACCALLUM

Detail of image from the in-progress book work, Trompe l'Oreille, two-colour photogravure from digital scan, 20 x 20 cm, 2010.

PHOTO | MARLENE MACCALLUM

Information about the range of activities associated with this project and related technical handouts can be found at: www.swcg.mun.ca/follis.

Marlene’s book works can be seen at: www.marlenemaccallum.com

BOOK ARTS DU LIVRE CANADA 2010 VOL.1 NO.2