

REDUCTIVE WOODBLOCK PRINTING

Relief printing is a direct form of printmaking where one may carve into a block of wood or linoleum to create an image. Ink is then rolled on the surface, paper is placed over the image and is rubbed with a baren to produce a print. A press may also be used to print the image. The most immediate form of block printing utilizes black ink and white printing paper. In this approach one simply carves out all the lights of the image and then inks and prints the remaining surface. Even so, one may pursue block printing further by utilizing color. Two methods often used are the multi-block method and the reductive method. I will be explaining how reductive block printing may be executed, and indicate its benefits and disadvantages over the multi-block method. I will also give some historical reference to the origin of the block print and the reductive color block print.

Of all the forms of printmaking which are available to us today, it is relief printing which is the most ancient.

Relief printing is known for its directness and simplicity of materials. The European woodcut was introduced in the late-fourteenth century as a form of communication to the illiterate masses. Often images were carved from wood to illustrate religious narration's.

By the late-fifteenth century, painters began to show an interest in making woodcuts. Artists such as Lucas Cranach and Albrecht Durer began to increase the vocabulary of the woodcut, creating intricate and delicate images.

Multi-block color printing was pursued around the early 1500's. These multi-block relief prints were called chiaroscuro woodcuts for they would utilize values of tone and shade. Each color was printed from a different block and registered onto the same piece of paper. It is theorized that color printing came to the Ukiyo-e School in 1549 when Saint Francis Xavier brought chiaroscuro woodcuts with him to Japan. The Ukiyo-e School also used multiple blocks. The only difference being that they used water based pigments on rice paper instead of the oil based inks of the West.

In 1862 Japanese color prints began to surface in Paris. This led to the exhibition of Ukiyo'e prints by the Paris Exposition Universelle. This greatly affected Western artists and began to incorporate Ukiyo-e concepts into their own work. Those inspired by the flat color, pattern and strong designs of the Japanese color woodcut were artists such as: Paul Gauguin, Vincent van Gogh, Mary Cassatt, Toulouse - Lautrec, Whistler, Edgar Degas, Edouard Manet, and Camille Pissarro. Paul Gauguin was particularly interested in the color woodblock during the 1860's - 70's. He would print color blocks off register and added stenciled blocks over his image. Gauguin later influenced Edvard Munch who began to incorporate the wood grain into his images. Munch also utilized the multi-block method yet

began to incorporate his own innovative techniques. Munch also used the same block but inked sections of the block separately with different colors, hence, pulling a multiple color image from one woodblock.

The German Expressionists in 1905, revolutionized the woodcut. "The Bridge" artists of Dresden utilized the woodcut to enhance their movement of dramatic expressionism. Artists such as Erich Heckel and Ernst Kirchner pushed the color woodblock to fully express a rich and vibrant palette of highly emotional images which were influenced by the drama of World War II.

Even so, the influence of the color woodblock began to diminish and did not begin to make a comeback until after the war. Interest in color printing became dominant, once again, during the 1940's and 1950's. In France, Pablo Picasso innovated the use of color by printing colors from the same block. Initially, all multi-color block prints were carved and printed from a separate block. This process was very time consuming since it required carving an infinite number of blocks and using more material. In the reductive method, one simply subtracts color from one block.

Picasso invented this reductive process in his exploration of the color linoleum block. By 1963 Picasso had created over one-hundred color linocuts. One of Picasso's first experiences with printing color was the typical technique of carving separate blocks for each color. Yet he experienced a lack of continuity in the image and found this separateness, slowed down his creativity. Through his inventiveness, and through creative necessity, he discovered the reductive block printing method.

To illustrate this concept the "Picador and Bull" , of 1959, is reconstructed into the steps which Picasso used. In (Figure 1), Picasso simply rolled the whole block as yellow ochre. He then created some type of registration system and printed the full block of color. Next he washed the ink off the block with a solvent and began to carve his next color. In (Figure 2), we can see that all the areas he carved out are white, then in (Figure 3), when this carving is super-imposed on the ochre background, we see that all areas he carved out will remain yellow ochre and the light brown overlays on top of the first

block of color. Picasso then carved the third color which is a dark brown. In (Figure 4), we see the image printed on white paper which shows the block in its third state. In (Figure 5), Picasso has overlaid the dark brown onto the lighter brown. In (Figure 6), he carved out everything he wanted to keep dark brown. A majority of the block has been carved away at this point, hence the name reductive block printing. In (Figure 7), Picasso overlaid the black onto his dark brown areas creating a four color linoleum print, cut from one block.

The advantage of the process is clearly the elimination of the tedium of carving many blocks and the frustration of registering the image to each block used for each color.

For example, Picasso was frustrated with the multi-block process he used for one of his first color linoleum cuts titled "Portrait of a Woman, After Cranach the Younger", (Figure 8). This linoleum cut was produced from six blocks (one of the few multi-block prints executed by Picasso). For him, the work was tedious, and when printed, as illustrated in the reproduction, the registry was

imperfect. This frustration led him towards the reductive method. The reductive method did not necessitate having many blocks that were identical in size. We see in "Luncheon on the Grass, After Edouard Manet", (Figure 9), which is one of his first reductive linoleum block prints, that his registration is perfect. The first color was yellow, then, after a succession of five stages of carving, he carved out blue, violet, red, green, and the last color being black.

Another issue which may be considered an advantage or a disadvantage is the fact that in the reductive method one may layer many colors on top of each other to create a dense and rich, oily surface, which creates a more painterly texture. (Figures 10, 11). The disadvantage is that each color sits on top of the previous color in a succession toward the final color. Whereas with a multi-block printing method, color may infiltrate beyond those boundaries, as we see in Frank Stellas multi-woodblock entitled "Pergusa Three (from the Circuits Series)". (Figure 12).

A distinct disadvantage of the reductive method is the fact that there may be no proofing so the final print is always a surprise. Once each color is carved there is not turning back so the drawing and color separations must be conceived of before any carving is executed. This may often limit spontaneity. Even so, the process of

the carving often dictates different moves and choices for the color that will be employed in each stage.

One way to obtain spontaneity and fluidity is in the initial drawing. One may complete an image on the block with pastel crayons of many colors. (Figure 13). After the drawing is completed one may spray a heavy coat of acrylic crystal clear over the entire drawing. (Figure 14). This way, the drawing is initially sealed under the acrylic spray so that when you further seal it with polyurethane, the drawing will not smudge or smear off the block. The layer of polyurethane is an added layer which protects the drawing from being washed away by solvents between colors. (Figure 15). After the polyurethane dries, it is then a key to color separations which will be progressively carved away until you get to your last color. You are now ready to begin carving.

If you wish to use white as a color it is best to use the white of the paper. These areas are carved out first. (Figure 16). This will play as your lightest value for these areas will never be touched by ink.

Before any printing is executed in a reductive block method you now must decide the edition number. In our example we have

chosen only an edition of three. The reason the edition number must be decided before any printing is executed is to account for the fact that once we begin carving away at the block, there is no turning back. Once we decide an edition number we must then decide on a registration system. One common method is the T-bar system. (Figure 16A). This system employs a line drawn on the back of the printing paper to distinguish a center line. You then draw with a permanent marker, the block size on a surface which may be periodically cleaned off with solvents. This surface is usually mylar of acetate. You then decide on your paper size and draw this around the block size utilizing a "T" which is drawn in the center on the top, and sometimes, on the longer images, on the bottom of the paper size. Once you begin printing you simply put the block in the designated area on the mylar and register the line on the back of your paper to each "T". This should secure accurate registration each time you print a color.

Another method you may use if you don't need a white boarder around your image, is to simply tear the paper size to the exact size of the block. This is a more straight forward method. For

you simply lay the paper directly on the block using the block size as a guide. This assures perfect registration for you have no boarders to contend with.

If you later decide you want a boarder, a simple solution would be to chine colle the image onto a sheet of paper. This is a method where one may spray adhesive or use methyl-cellulose (wheat paste), on the back of an image. You then place the image face down, tacky side up, and place a sheet of white paper squarely centered on it and rub on the back or run it through a press. The print will adhere to the white paper perfectly to give you a surrounding white boarder. This could also be used with any color of paper to create a different colored boarder.

In my reductive example, I have decided to use paper which is the size of my block. My initial step is to create a field in which I will work from. It is usually best to begin color organization from light to dark. This is due to the reason that colors are constantly going to lay on top of themselves. When you begin with a light color

you allow yourself a broader spectrum to work with. If one begins initially with a dark color in the process, it begins to get more difficult to print a range of colors unless you are looking for a more muted effect.

Once my white areas are carved out, my block is ready to be rolled up with the lightest color. (Figure 17). In my example the initial color is a yellow ochre. When the first block is printed I am essentially printing two "colors" in one printing. One is the yellow ochre, the other being the white of the paper. (Figure 18). Notice that after I print the first color and begin to carve the block once more my edition number is finalized, for the initial yellow block can never be printed again (Figure 19). For once I begin to carve the next color the block is permanently altered.

In the next stage the block is then completely cleaned with a solvent and my drawing remains protected under the polyurethane layer to dictate the carving of the next color. I then proceed to carve out everything I want to keep yellow ochre. When I roll up with the next color, ink will be attracted to the areas which have not been

carved out, therefore the yellow ochre will from now on be protected from any other color over-laying on top of it. I then roll up the next color, which in our example is a forest green. (Figure 20). When the image is printed in (Figure 21), I can now visualize how my colors are beginning to lay on top of themselves. If I wish to obtain many colors it is best to start with lighter colors and attempt to carve out smaller areas at a time so that I do not “over-carve”, or run out of block to carve. In this example there will be only four colors (not counting white), so the carving process is much broader and faster.

After the block is cleaned, I am once again ready to carve out the next color. I now carve out all the areas I wish to keep forest green so when I roll up with the next colors these areas will not be touched by the brayer.

Once the image is printed, we see a nice overlay of Indian red over the forest green as our image begins to appear. (Figure 22).

The last color in our example is a burnt umber. Once all the areas which I want to keep Indian red are carved out one can see why this method is called the reductive block process, for there is

hardly any wood left to roll up. (Figure 23). Once I print the burnt umber over the Indian red, the image, (Figure 24), and edition, (Figure 25), are completed.

Reductive block printmaking is often used for its immediacy and elimination of the use of many blocks. It is a method which is limitless in its execution and well worth exploring. Color block printing as a whole, has evolved into a multi-faceted contemporary medium utilized solely, or in conjunction with other mediums such as intaglio and lithography. Artists such as Louisa Chase, Richard Bosman, and John Buck have explored the color woodblock towards innovative directions. Printmaking facilities employ master printers who give expert advice to artists and printers using not only manual carving tools but power tools as well which encourage large scale work. With the enthusiasm and curiosity of contemporary artists, the color block print will always be employed to create works of graphic directness.

There is no doubt that the reductive color block, whether it be executed in wood or linoleum, or carved reductively, or with multiple blocks, will continue to be an important medium in the ongoing development of contemporary images.

Bibliography

Karshan, Donald H. Picasso Linocuts 1958 - 1963. Tudor Publishing Company, New York, 1968.

Lieberman, William S. Picasso Linoleum Cuts. Random House. New York, 1985.

Romano, Clare. Ross, John and Tim. The Complete Printmaker Techniques, Traditions, Innovations. Collier Macmillan Publishers, London 1990.

List of Figures

Figures 1-7 - Picasso, Pablo. Schematic reconstruction of the steps in the cutting and printing of Picador and Bull, Reductive Linocut, 21 x 25 1/4". The Computer Applications Incorporated Collection, New York.

Figure 8 - Picasso, Pablo. Portrait of a Woman, after Lucas Cranach, 1958. Multi-block linoleum cut, 25 1/2 x 21". Mr. and Mrs. Charles Kramer.

Figure 9 - Picasso, Pablo. Luncheon on the Grass, after Edouard Manet, 1962. Reductive - Linoleum cut, 20 7/8 x 25 1/4". Louise Leiris, Paris.

Figure 10 - Parker, Karla M. Maid, 1994. Reductive - woodblock, 48 x 48". Mr. and Mrs. Scott Lampe, Texas.

Figure 11 - Parker, Karla M. Pinche Perros, 1994. Reductive woodblock, 48 x 48". Collection of the artist.

Figure 12 - Stella, Frank. Pergusa Three (from the Circuits Series), 1983. Multi-block woodcut. 66 x 52". Tyler Graphics Ltd.

Figure 13 - Parker, Karla M. B.C., 1994. Pastel drawing on wood. 12 x 14".

Figure 14 - Parker, Karla M. B.C., 1994. Block with image sprayed with Crystal Clear and coated with polyurethane.

Figure 15 - Parker, Karla M. B.C., 1994. Block with first color wiped away by mineral spirits.

Figure 16 - Parker, Karla M. B.C., 1994. Block with white's carved out.

Figure 16A - Multiple block "T" bar Registration". 1) Printing paper with line drawn on back, 2) woodblock in register, 3) printing paper in register over woodblock.

Figure 17 - Parker, Karla M. B.C., 1994. Block rolled up with Yellow Ochre.

Figure 18 - Parker, Karla M. B.C., 1994. Yellow Ochre printed on Masa rice paper.

Figure 19 - Parker, Karla M. B.C., 1994. Example of edition number.

Figure 20 - Parker, Karla M. B.C., 1994. Block in second state with Forest Green rolled up.

Figure 21 - Parker, Karla M. B.C., 1994. Second state on Masa rice paper.

Figure 22 - Parker, Karla M. B.C., 1994. Image in third state.

Figure 23 - Parker, Karla M. B.C., 1994. Block in final state with Burnt Umber rolled up.

Figure 24 - Parker, Karla M. B.C., 1994. 12 x 14". Final state of "B.C."



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9



Figure 10



Figure 11



Figure 12



Figure 13

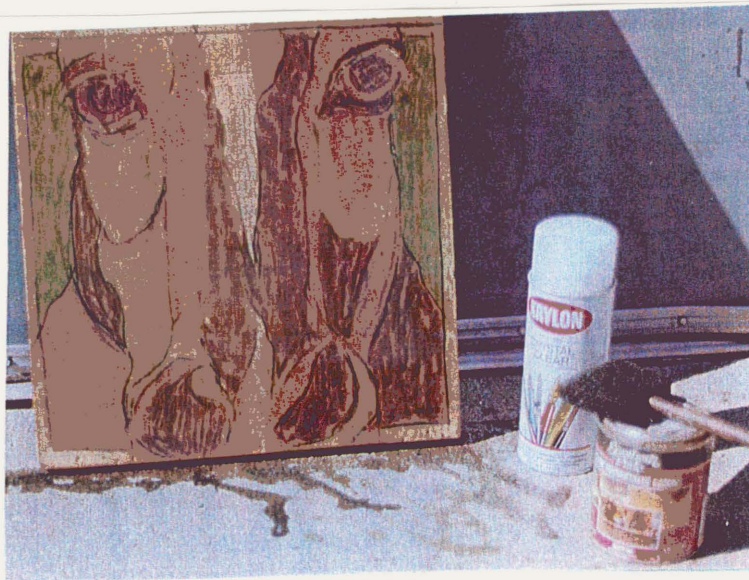


Figure 14

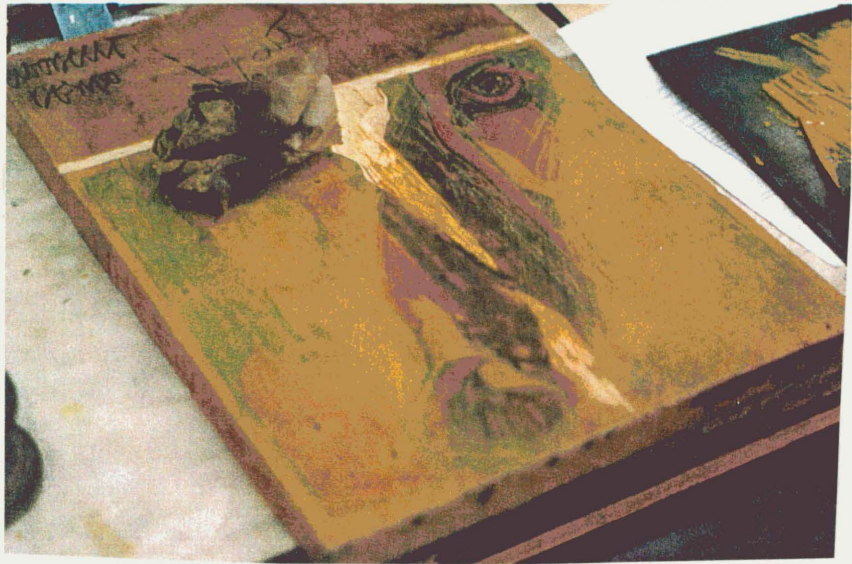
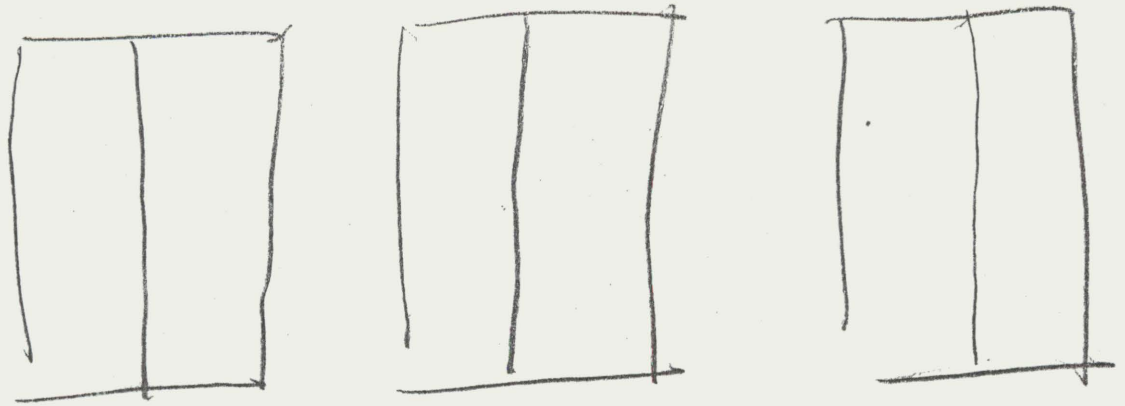


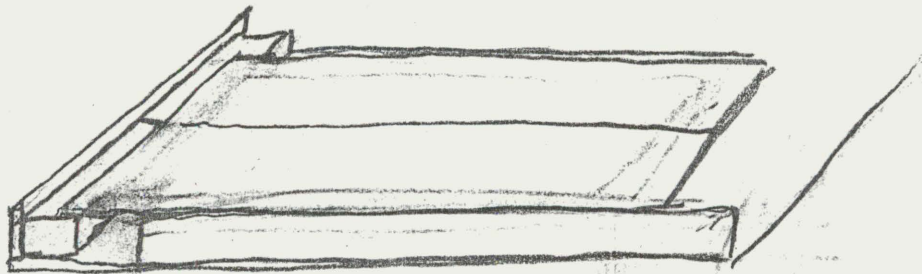
Figure 15



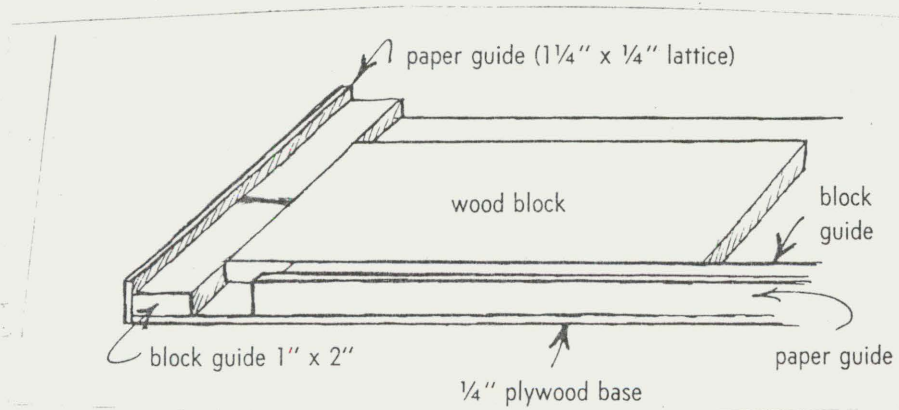
Figure 16



Line drawn in pencil in back of printmaking paper



Register frame with paper in place



Register frame with woodblock in place

Figure 16A



Figure 17

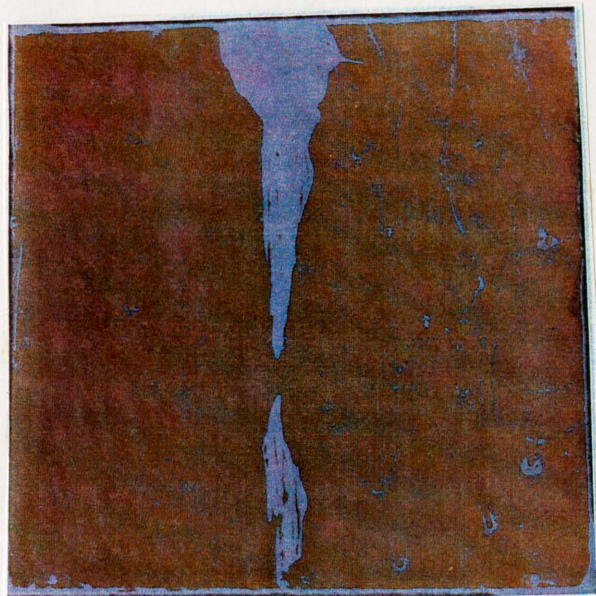


Figure 18

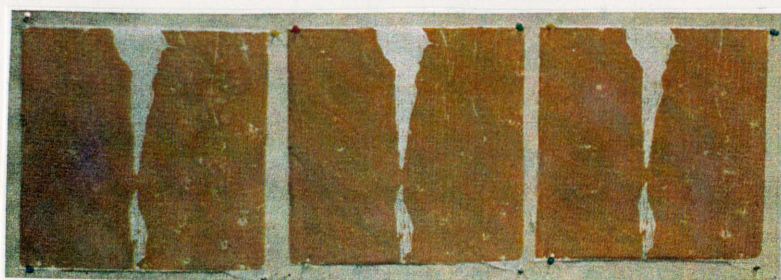


Figure 19



Figure 20



Figure 21



Figure 22



Figure 23



Figure 24



Figure 25

5. M.F.A. CANDIDATES CLEARANCE FOR ART HISTORY RESEARCH PAPER

This paper must be completed and filed before the final examination of the candidate. This clearance sheet must be filled out and filed in the candidate's record.

I have completed and filed the original term paper in art history in the Art Department office and I have given a copy to the course instructor.

_____ Spring _____ 93 _____
Course Number Semester Year

_____ 5/93 _____
Date

_____ [Handwritten Signature] _____
Student signature

_____ Susan Silberberg-Pence _____
Instructor signature

Adviser signature