Booklet #22: The Northern Virginia Alliance of Camera Clubs

POLAROID TRANSFER PROCESS

by

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PREFACE

The Northern Virginia Alliance of Camera Clubs (NVACC) is an informal organization started in 1997 by Joseph Miller with the assistance of Dave Carter and Ed Funk. Our purpose is to promote communication and cooperation among camera clubs. We accomplish this by (a) publishing a monthly calendar of the member clubs' activities; (b) conducting training seminars for photographic judges; (c) maintaining a registry of trained judges who serve the clubs' monthly competitions and critiques; and (d) maintaining a directory of speakers who have been recommended by the various clubs. You can learn more about NVACC by going to our web site at www.NVACC.org.

This booklet is one of a series that was developed by NVACC during the period 1998-2008 to capture the considerable expertise of the many accomplished photographers in Northern Virginia and share it with others. Over recent years, we have seen significant change in the photographic art form and very rapid technical advance in both the media of photography (film and digital) and the tools (cameras, lenses, computers, and software). For that reason, the detail of some of these booklets may seem "dated", although the ideas and techniques presented transcend "progress" and the digital-film divide. Watch the NVACC web for new booklets as well as revisions that incorporate new technology and ideas into the existing ones.

Originally, our booklets were made available through member clubs for a small fee that covered the cost of reproduction. Now, however, the booklets are available on www.NVACC.com where individuals may download one machine-readable copy and one print copy per page for personal, noncommercial use only. Written permission from NVACC is required for any other use.

If you would like to know more about NVACC or have questions or suggestions concerning our booklets or services, please feel free to contact us at JoeMiller@NVACC.org.

Polaroid Transfer Process

The Polaroid image transfer process is a highly individual process. It is helpful to read and to watch others, but eventually you will have to develop your own way. Take notes and welcome happy accidents.

The following information is provided for those who have a basic understanding of the image transfer process. If you do not have this basic understanding, consult the Polaroid materials listed in the bibliography. The process described below applies to the Vivitar® slide printer, but most of the information also applies to use of the Daylab® printer.

Prepaation

1. Selecting an image. The easiest images to transfer are those that were taken in diffuse light and still have pretty good color. Most difficult are contrasty shots, but these images also offer more possibilities for interesting, but unexpected, effects. Dark areas are often the cause of "lift" problems — the emulsion not sticking to the receptor surface. Because the transfer image is slightly smaller than the slide, slides with some annoying distraction around the edges but an interesting center can be used for transfers. I have also used slides with very distracting backgrounds to make transfers and then applied layers of color with pencils onto the background of the transferred image. Sometimes this works well, sometimes it looks terrible.

2. Paper. I use Arches 140# hot press watercolor paper and Windsor Newtpn 140# hot press watercolor paper. The Arches is creamier and smooth. The Windsor is whiter and has a faint pebbly texture that is very nice with some subject matter, such as adobe buildings. The Windsor also curls less after it is wet. Other people use different papers. This is an area for experimentation.

I love the feel of the 140# papers; however, if I am testing an image I can just as easily use Arches 90# hot press paper. This paper really curls when it gets wet!

To tear the paper, I lay it out on a table, face up, and tear a strip off, using a metal yardstick to tear against. Then I tear across the long strip for the individual sheets.

When tearing the water color paper to make the small receptor sheets, I make a small arrow in one corner so that I can keep track of which side is the "top." I always use the side of the paper on which you can read the company's logo or mark correctly, i.e., I use the paper right side up. For me, images printed on the back side often have white areas all through the image, an effect that I do not like.

I like to mat the images in a window mat with about 1/4 or 3/8 inch of paper between each edge of the image and the mat, so I tear the sheets large enough to accommodate

that and the fact that I may not always lay the negative down exactly in the center of the receptor sheet. My sheets are approximately 4.2 by 6 inches.

3. Cropping. If I cannot get the image cropped exactly as I would like by using the adjustment available on the printer, sometimes I remount the slide in a #4 Erie slide mount, moving the image so that I can get what I want within the frame. Erie #4 is just slightly larger than the opening in the viewfinder of the slide printer.

4. Filtration. I often use filters in between the little black holders that are in the slot into which you insert the slide. I use Kodak color compensating filters (75mm square) that I cut into small pieces. I use 30cc Red a lot. I also supplement it with 10cc Yellow. Occasionally I use just the yellow, or maybe 2 yellows. I use them because I like a warmer image. Rarely, I use no filters.

The red or magenta filter holds back green but adds to the reds and other warm colors in the image. The yellow filter accentuates the green in an image, but holds back blues.

5. Film. I never store my 669 film in the refrigerator or freezer. My best results seem to be with film that has been around my house for awhile. I usually store it in the kitchen, the warmest area in my place. Store it lying flat, rather than upright. I have used Polaroid 100 film for transfers but it does not work as well. Polaroid 689 film cannot be used for image or emulsion transfers.

Doing the Transfer

1. Setup. My setup includes the Vivitar® slide printer, a pair of scissors, a clipboard, a brayer, a small corning cookware casserole dish filled with very hot tap water and sitting on one of those plug-in warming units you use for buffets, paper towels, and a bag for trash. I also have a small palette knife, Q-tips, and a fine watercolor brush handy.

2. **Recording.** I record each printing session (by date) in a small notebook. I identify the frame number of the film (1 - 8), the slide (especially important if you have the same version in different exposures), the exposure setting on the slide printer, and filtration (i.e., 30R/10Y, 20Y, no filters). I also write this same information in pencil on one edge of the receptor sheet, along with the date.

In this notebook, I note when I change batteries in the printer. If the session is not going well, and I have had a number of sessions since I last changed the batteries, sometimes this is the solution.

3. Exposure. I label the long bar on the exposure dial as N; the bars under the long bar as 1-, and 2-; and the bars above the long bar as 1+, 2+, and 3+. For most of my transfers, I use N or 1+, but exploring the extremes can yield interesting results. For dark slides, it is possible to expose the film two or three times, as long as you wait for the red light to come back on between exposures.

4. Preparing the receptor surface. I soak the paper in the hot water for about 10-20 seconds (less for 90# paper); lay it on a paper towel and wipe it with another paper towel. I lay it on the clipboard and run the brayer firmly over it. This seems to smooth the surface and to keep the Arches paper from starting to curl before I get my negative on it.

5. Applying the negative to the paper/receptor. I expose the film and pull the packet from the slide printer. Once I pull the film packet from the slide printer, I cut a little off of both ends, getting rid of most of the developer. This also uses up most of the 10 seconds that you need to wait before separating the film packet. After a minimum of about 10-15 seconds, I separate the film packet (pull quickly), and carefully lay the negative portion onto the center of my receptor sheet. Be careful not to move the negative or the image will be blurred.

6. Transferring the image. I rub the back of the negative with my finger fairly vigorously. Others use a rubber brayer for this part. I found that the brayer does not always get all parts of the image to adhere and that I got messy edges that I did not want. However, if I wanted these effects, I would use the brayer. A hard (plastic) brayer is not recommended.

If I turn the positive image in the same direction as my transfer (align the tab ends so they face the same direction), I can determine which areas are the dark areas and can especially rub the back of the negative in these areas to help the emulsion adhere better. After rubbing the image, I place it back into the warm water, floating the paper on top of the water, rather than immersing it. Floating results in a less messy image, however, if you want a water-soaked effect, immersing it may be just the right thing to do.

I usually like most of my images to have neat edges, especially if the image is a graphic one. Some images of watery subjects, deteriorated buildings, graffiti, etc. may be more effective with messy edges. Some people love the messy edges and want them for all their transfers.

7. Peeling the negative. After enough time has passed for the image to develop (at least 60 seconds), I pull the negative from the receptor sheet (pull slowly). When I do this, many times I take a little water and run it across the edge that I am going to pull away from the paper, resulting in a little ripple of water that assists in the pull-off process, a technique I learned from Tina Williams. This method often smoothes the pull-apart process and results in less "lift" problems. If I am having difficulty peeling images, I will submerge them in the water and peel the negative off under water.

Some people suggest using a palette knife to get the emulsion to lay back down. I clean up any remaining developer along the edges, wipe away excess water around the edges, and clean up anything else that is bothering me. (Some people leave the developer on. This leaves a brownish stain that is characteristic of the process.)

8. Evaluating the image. I evaluate the image (exposure, filtration, cropping, etc.) and

make notes in my notebook. My notes are usually brief and subjective, such as "good," "better, "too light/dark," or "not worth the effort."

If I encounter lift problems of substantial proportion (more than just small amounts around the edges), I immediately decide whether I like the image as it is, or whether I want to try to lift more emulsion off the receptor sheet. If I decide to lift more emulsion off, I use my fingers, a paring knife, or palette knife and a gentle stream of running water to help with this process. Sometimes a bad image can become a wonderful image. If I dislike the original image enough, I go ahead and experiment with removing more emulsion. If I want to etch or highlight an image, I do it now. (See Etching/Highlighting under Variations.)

9. Drying. I let the image partially dry on a flat surface and then hang it up with clothes pins to finish drying. After it is dry, if it is wrinkled, I place something on top to flatten it out. I have found that my judgment about an image is not very accurate at this point. Some images that I thought were wonderful became disappointing later when I began the pencil work or after time had passed. The converse is also true. I save all my images despite what I think of them at this point.

Variations

Double Exposures. These can be done two different ways.

1. Remove the filter holder. Insert two slides into the slide slot. If you are using filters, put them between the two slides. Set the exposure appropriate for the sandwiched image. Expose the film one or more times, waiting for the red light to come back on between exposures.

2. Keep the filter holder in. Use filters if you wish. Set exposure at lowest setting. Insert one slide and expose the film. Insert the second slide. AFTER THE RED LIGHT COMES BACK ON, expose the film again.

Etching/highlighting.

1. For etching fine lines, use sharp tools such as a nut pick or stylus to scratch or draw in the WET emulsion. (Some people suggest using an X-acto® knife to etch the image once it is dry, but I find this process difficult to control, especially for any curved lines.)

2. For highlighting small areas such as flower petals, door handles, or small windows, use fine water color brushes, Q-tips, etc. to push or lift the emulsion away. Essentially, you are clearing away the emulsion and using the paper base as the highlight.

3. For removing emulsion from larger areas, such as the background, use a larger, flat watercolor brush (a shader or shadower), your fingers, etc.

Finishing the Transfer

1. Enhancing the image. After the image has dried, I make decisions about whether to enhance the image with colored pencils or leave the image as it is. Pastels and watercolors can also be used. The pencils are easy to use and also easy to remove with an art gum eraser. Pencils can be used to add detail lost in the transfer process and can be used to straighten a fuzzy (soft-focus) edge.

Apply the pencils lightly and use Q-tips to rub the area. I like to layer colors for a richer effect, such as yellow and pink in sunny areas and blues and purples in shadows. Since these are small images viewed up close, a little color goes a long way. Adding too much color can overpower rather than enhance the image. If too much color has been added, partially erase it, totally erase it, or tone it with an opposite color, such as grayed lavender over yellow; green over red, etc.

2. Colors. When altering the transfer with pencils (or other media), I think that the palette of colors should be related to the filters used during the transfer process. I tend to use red and yellow filters a lot, and I also use a lot of yellows, pinks, and warm reds and browns when I do the coloring with pencils. But these warm colors might look out of place on transfers done without the warmer filtration. Black can leave a visual "hole" in an image, so I use purples, blues, greens, and browns to enhance shadows and dark areas. For highlights, I sometimes use "neon" colors. They do not look neon on the transfer and often these add just the right amount of spark to an image.

I tend to use colors suggested by the transfer itself, rather than colors in the original image. This is part of the fun and individuality of the transfer process. I often shoot images that I think will lend themselves to this distortion process.

For overall guidance on how to use color, I referred to the "push-pull" concept described in watercolor textbooks. Using a landscape with a shack in the foreground and mountains in the background as an example, either (1) color could be added to the shack and not to the background or (2) warm colors could be added to the shack and cool colors to the background. Each of these techniques would have the effect of "pulling" the shack closer to the viewer and "pushing" the mountains away. I use this as an example only. For some images, the charm may lie in a flattened perspective, achieved by use of the same overall tones that are often present in an unaltered transfer.

3. Supplies. I get my pencils from J. F. Thomas Wholesale (Berol Prismacolor and Verithins) and from Pearle (Marshall Photo Pencils). I started with the Marshall's and still use them the most, although I probably own one of every color made by Prismacolor!

My suggested starter kit includes the following Marshall pencils:

  Cadmium yellow deep *

  Sky blue

Oxide green

Basic flesh (useful for more than skin tones)

Tree green

Ivory black

Sepia

Verona brown

Navy blue

Cobalt violet

Lipstick red

Cheek

I would add to this list, Prismacolors pink and grayed lavender.

> * *Cadmium yellow deep* is a standard color for me. I use it in almost every transfer. It is a warm yellow that adds a sense of sunshine to highlight areas. Marshall's also makes a Cadmium yellow that I almost never use. I find it to be a very cold and greenish yellow that I do not like.

Prismacolor makes a large selection of wonderful blues and greens.

4. Presentation. To get a good idea of how the image is looking, I insert the image in a spare window mat or use my L-shaped cropping guides. The mat makes quite a difference since the images are small and the borders of the paper usually narrow.

Often I tidy up the edges where there is occasionally a blue strip or partly blue strip. I try to blend these edges with the image itself, so use layers of colors from the image (such as blues and greens with occasional layer of black) to tone down these blue strips. My guide for this is whether I think the strip is distracting. If it blends with the image, then I leave it alone.

When I mat the image, I usually leave space around the edges. Occasionally I crop it severely and only use a small portion. My guide for this is whether the edge, the background, or any existing "lift" problems contribute or detract from the message of the image. Occasionally I have torn around the edges of the image and attached the torn paper to a piece of mat board.

5. Preservation. I am concerned about the durability of the images and the extent to which they may fade over time. I have begun spraying them with Marshall's Protect-a-coat, a UV protective spray, applying five coats as recommended by Theresa Airey.

Warning

The chemistry used in the Polaroid peel-apart films is caustic. Avoid contacting the paste with your skin, mouth, or eyes. If you get the paste on your skin, rinse immediately with water. If your skin is sensitive, you may want to wear rubber surgical gloves.

Summary

The image transfer process offers opportunities for many creative decisions throughout the process. Decisions about receptor surface, filtration, exposure, pull time, handling the edges, enhancement with other media, color palette, and matting make each person's use of this media unique. Each of these decisions are made in the context of how the results of these decisions contribute to the content or message of the final image as envisioned by the maker.

Bibliography

Polaroid materials. Call 800-225-1618 to request free informational materials on image and emulsion transfers:

Advanced Image Transferring. Polaroid Guide to Instant Imaging. (1991). Polaroid Corporation.

A Step-By-Step Guide. (1995). Polaroid Corporation.

Polaroid's website (www.polaroid.com) has information about their films and an artist's studio section that provides information about and images of various artists working with Polaroid films.

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Airey, Theresa (1996)   *Creative Photo Printmaking.* New York: Amphoto Books. (Includes a chapter on image transfers and emulsion lifts.)

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Watercolor information.

LeClair, C. (1991). *Color in Contemporary Painting.* New York: Watson-Guptil Publications.

ADDENDUM: EMULSION TRANSFER PROCESS

1. Expose Polaroid 669 film (or other compatible film) in the printer and bring the print fully to development, i.e. allow 60 seconds before separating the positive and negative. Prints aged at least 8-24 hours are easier to do emulsion transfers with, but heating a fresh print with a hair dryer for 5-10 minutes will work.

2. Apply contact paper to the back of the print to keep the white backing from melting during the transfer process. It is often easier to do the transfer with the white edges cut off, but transfers can also be done with the edges on. If you are going to trim them, do that now.

3. Immerse the print, face-up, in a tray of 150 -160 degree water. Use a darkroom thermometer to read the temperature, if you have one. If not, use water that is cool enough that you can keep your fingers in it for 2 seconds.

4. After 4-5 minutes, move the print (carefully) to another tray of room temperature water. Gently check with your fingers to see if the emulsion has loosened from the substrate, but don't remove it.

5. Lay the print face down on a piece of firm acetate.

6. Work the substrate loose from the emulsion and remove it, leaving the emulsion on the acetate.

7. Manipulate the image, wrinkling it, or swishing it in water to remove unwanted wrinkles.

8. Immerse the receptor paper (or other substance) in water and do not wipe it off.

9. Lay the acetate, emulsion side down, onto the receptor paper. Rub the acetate to remove
air and water bubbles. Carefully remove the acetate.

10. Do any additional manipulation, wrinkling, folding, etc. swishing the image in water, using a water color brush, or other methods.

11. Once the image is the way you want it, place the paper on a paper towel to help absorb the excess moisture. Remove air bubbles and excess water by rolling the image with a rubber brayer. ROLL FROM THE MIDDLE OUTWARD, USING JUST THE WEIGHT OF THE BRAYER.

12. Manipulate the edges if you wish.

13. Allow to dry.