

KEEPING PACE

A Monthly Newsletter Devoted to the Darkroom Arts

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Developing an Eye for Color

In the Sept. 93 issue of Outdoor Photography, Galen Rowell's article on the perception of color was right on target.

He said in essence, that what we see in nature, and what we believe we see with our imagination, and what the film is able to see, are three distinct and different images.

All of us have different "eyes" when it comes down to accepting color. We all see a sunset with a different viewpoint, and we try to capture that sunset on film. Later, when the film has been processed, we are not seeing what was really in the original scene, but what the film was capable of recording on it's limited sensitivity range.

We see the transparency and say "great." Yet we would all see the image

differently.

This is the essence of becoming a master color printer.

If a photographic "artist" was shooting a scene in 1920, and were using a "one shot camera" and after shooting a scene produced a Carbro print, and the composition was correct, and the image created an emotional response, it would be considered a work of art.

Would it be accurate in color recording? No. It wouldn't. It would be off considerably. However, the chosen color balance would be the rendition that the "artist" had chosen in order to make the desired impression.

If color films were able to accurately record a scene in all of it's color, it would be a large miracle.

Would such a scene make

an emotional impact on the viewer? I doubt it very much. Galen Rowell explains that one of his images was a rich colorful scenic with a person in the shot. When the color that he was after in the scene was achieved on film, the person's flesh color appeared too garish. When the flesh color was acceptable, the scene appeared too dull. This is the main argument for quality darkroom technicians and their ability to "dodge and burn."

Our imagination controls our actions. We see something in a scene and prepare to capture it.

When the film comes back from the processor, we see a brand new image. Our weak color memory tells us that we have a "perfect" match. But in reality, we aren't even close to the original color.

Consider this. All color films are manufactured to be exposed to a specific Kelvin temperature light source. Any deviation from this exact Kelvin temperature will distort the scene. Sometimes for the better. Sometimes not.

When I first began my personal color experience, decimered filters were used and always available.

If the photographer used a color meter, he could then be able to determine the difference in Kelvin ° from the intended Kelvin ° demanded by the films manufacturer, and by using decimered filters, retain some of the accuracy of color of the object being photographed. When was the last time you saw ads for Kelvin control decimered filters?

The filters sold today are simple deviations from this complicated color correction system.

Today's films are so colorful that one company tries to out-do the other.

Kodak films are very accurate when shooting grey scales and the colors in the transparency do not appear to be wildly inaccurate. Fuji films on the other hand, tend to be over colorful. Sometimes for the good, and sometimes for the worse. Grey scales may be grey but this does not mandate that the rendition of the colors are accurate.

But, in the final consideration, who cares.

Use the film that you believe give you the best results.

Then be concerned about the reproduction of that image.

Remember, the eye can see much more of a range than the film can, and the film can hold a greater range than the paper print can.

The print then, is the final "resting place" for the image. It is here that the imagination and the technical superiority of the printer becomes very important.

Does the print move the viewer? If not, then something may be wrong. Is it the image itself? Or is it the interpretation of the printer. Perhaps it is the viewer. Ten people can look at a print on display in a gallery and each will see something different about the print that excites them or turns them off.

If a photographer is known to be a scenic artist, then he is known to the general public as a scenic artist. Ansel Adams is a perfect example. We all acknowledge that Ansel Adams was known for his dramatic portrayals of scenic beauty. How many of you knew that before he became so well known for his ability to produce exciting black and white examples of nature that he was a commercial

color photographer?

He made food shots for magazine ads. He shot scenics for brochures. We all must grow in this crazy field of color or we become static.

We once owned a gallery in Los Angeles called "Silverworks" where we displayed the works of many fine photographic artists.

When we had an exhibit of Tom Kelley's art work, we were admonished by a local "artist" that we were showing the prints of a commercial photographer and not of an art photographer, and trying to pass it off as "art."

Little did the irate viewer realize that even "commercial" photographers have an urge to create something artistic. Tom's work consisted of table top set-ups that took weeks, and sometimes months to set up before he was convinced that he had the correct composition, lighting and exposure control. Tom actually produced the image well before he captured it on film. Was his work to be denied a hanging in a gallery? Not in my opinion.

We made the gallery prints for Tom Kelley. He examined every test we made and sometimes would change the direction we were headed in and would cause a dramatic change in the print. Did we learn something from this great artist?

We sure did.

This brings us to the print.

What kind of print do we need to make in order for our interpretation to be acceptable?

It really doesn't matter. I have seen sensational C prints and I have seen miserable Carbro prints. It is not the process that matters, but the interpretation of the printer to get the most exciting rendition of the original. I began my career by making Carbro prints. This is a process that can produce a prize winning image or a flop. Believe me, I know. The process is so demanding, that it leaves little room for an inaccurate decision about color balance, contrast, or density.

These decisions were made during the production of the black and white prints known as "bromides."

To produce accurate "bromides" we made small tests prints before we made the final full sized black and white prints. We would choose the density, and color balance, but the contrast was usually determined by the sensitizing solutions just before the combining of the pigments and the "bromides."

The degree of accuracy demanded that the printer be very adept at "seeing" the subtle changes in the "bromides." It was these subtle changes that made it possible to produce a "great"

print, as opposed to a "good" print.

This training of the eye took a long time to develop. In the city of New York, there were only four Carbro printers.

One was terrible, another was adequate, a third was very good, and the fourth was excellent. I worked for the excellent printer. I certainly learned quite a bit about the Carbro process. It was here that I learned about "separations."

Remember, we didn't have to make separation negatives in these early days.

The negatives, (sometimes, glass plates) were presented to us and we made the most of what we had.

We sometimes would make correction masks to bring the density ranges closer together.

The audacity of the photographers.

They knew very little about our requirements for making good separation negatives. They shot the images, but were hardly qualified to process the separation negatives to the correct degree of contrast and the accuracy of matching curve shapes. Their field of competence was in the use of the camera, the lighting, and the composition. We, the printers were able to produce more accurate separations, but we were rarely

consulted by the photographers.

Now we have an interesting development.

With the apparent trouble the Dye Transfer field is experiencing, the "Carbon" craze is back with us.

The galleries are exhibiting vintage Carbro prints and are selling them for outrageous prices. Are these old Carbro prints fine works of art or simply artifacts of antiquity and are being sought by "collectors?"

I believe the finest work in Carbro has yet to be made.

Rene Pauli has made some great images, and so has **Charles Berger** with his UltraStable process.

The latest entry in this "Carbro" print system is **EverColor.**

The prints that I have seen by all three participants have been excellent.

Unfortunately, Rene only makes prints of his own images.

The UltraStable company will assist you in obtaining the required screened separation negatives and in supplying you with the color pigments and information needed to make your own assemblies. Except for the cost of producing the screened separations, a very small investment is needed in order to make your own prints.

EverColor, on the other hand, will make the prints for you. Bill Nordstrom is a master printer and will probably make a better print for you than you could make for yourself.

If you so desire, you can visit the firm's lab in Northern California and experience the thrill of seeing your image on a quality monitor and participating in the manipulation and creation of a work of art.

You can also make your creation on your own workstation and send the disc to EverColor and the print will again be your own interpretation.

The only hand's on process still alive, however, it is in a sick bed, is the Dye Transfer process. The Dye Transfer process has yet to be buried. I firmly believe that some company will continue the manufacturing of the essential elements needed for the production of these fine prints.

Don't give up hope yet.

For the color print enthusiasts that cannot afford the equipment or the time to learn new tricks, there is still the Cibachrome process. This process is completely controllable before the material is processed. The sharpness of the product material is great. The degree of contrast control is readily available by reading

about and understanding the necessity for masking.

I have seen some outstanding examples of fine art in all photographic processes, and the Cibachrome process certainly hold a high position in this art form.

The colors produced by the Cibachrome process are brilliant. They may not be accurate, but they certainly are exciting.

The prints can be processed quite rapidly and remakes for improvement is not a problem.

This takes us to the present time. What can we do if the Dye Transfer Process is withdrawn from the market? Are there enough darkroom enthusiasts in the world that may take another approach to the color print market? First of all, let us examine the market. The commercial field is out. The advent of scanners and digitized equipment has placed most of us out in the cold.

If we want to continue to make prints for the art market, then we have to bone up on some of the requirements.

Most galleries want great looking images. The collectibles will be here forever, but the new work requires that desirable images must be photographed, and that a great color print process must be used to excite the viewer.

Visit a photographic gallery in your city. Look at the kind of quality that is being presented. Most of the color images are mediocre. Only a few are good.

Will a collector buy a print of yours? A collector will not, until you create a following of buyers that look specifically for your work.

I don't care what process you use. However, if it is a C print, and someone buys it, it will be for a small price. If you make a Cibachrome print, it will have the chance of being sold for more money.

Again, the longevity of the print has a bearing on its price.

This is why even mediocre Carbro prints are still in demand.

Remember, when I made Carbro prints in New York in 1948, there were only four labs producing these images. The worst Carbro printer, who shall be nameless, has had a revival in the art field. Some of his Carbro nude life studies were found and declared a "find" by the art critics.

Is this a true representation of "Art" or simply a discovery of a lost process and much is made about nothing.

I remember seeing a Carbro print made by Charlie Thill, an assistant for Nicholas Murray, one of the world's

finest photographers and pioneer in shooting and printing color, and saying to myself, "I have died and gone to heaven."

It was an image that consisted of a light white seamless background, on which rested a white cup with little delicate blue designs and a saucer, with the same little light blue designs on it, and with a taller teapot in the background, again with similar light blue designs, and a tiny yellow rose, with green leaves and a smooth stem in a small white vase. The composition was excellent, and the rendition of the image was breathtaking.

I wanted to retire. How did Charlie get such a smooth and even background? The density couldn't have been improved and the color balance was dead on. At this time, I had made many Carbro's and was slightly jaded in my opinion of the works of others, but this one print put me back in grade school.

Is it possible to make quality prints like this in your own darkroom? The answer is yes. But it will take all of the knowledge and experience you can gather.

If you know how to make great separation negatives by enlargement, on 4x5 film or on 8x10 film, then there is no reason why you couldn't make great negative images on 16x20 or 20x24 film.

You probably have most of the equipment you will ever need in your own lab right now.

Large trays are necessary for processing the separation negatives.

Some people can only handle one sheet at a time, while others may be able to handle all 3. It takes practice and dedication to accuracy.

If you can make three enlarged separations up to 8x10, you could purchase the necessary color pigments from Charles Berger's UltraStable company and experiment with the process yourself.

Keep the sizes small so as not to incur large expenses. You will need an Ultra Violet light source and a pin registered vacuum frame.

Don't be afraid to try it. Screened separations are not always necessary.

I recently returned from a trip to Santa Fe, NM. This was a fact finding trip. The facts that I found were disappointing. Santa Fe is supposed to be a mecca for the artists and art galleries. It is. However, the photographic art galleries had much to be desired. The few galleries that I was able to find showed the work of the same four artists. Elliot Porter was featured, as was John Wawrzonek, Jim Bones and Rene Pauli. That was it. No one else.

I have seen more galleries and more photographers exhibited in Los Angeles and Beverly Hills.

I would imagine that San Francisco and New York are the major areas for showing photographic art.

The galleries take a large commission out of the art sale. Some are as high as 70%. The artist must be able to do better than that.

Well known exhibitors do not have this problem. However, beginning artists are subjected to more sales constrictions than anyone else.

Training the eye.

To me this is the most important element in the entire field of fine art photography. How does one get to this point in life? Experience is the first requirement. Then studying the images and trying to "see" what it is about an image that disturbs you, or what can be done to improve it.

I sometimes think that you may have to born with this "gift."

The process doesn't matter. The better printer, when combined with a great process, can create a masterpiece. I have seen the eyes of Ed Evans and Glen Peterson examine a proof print, and after the changes were made according to their taste, the final prints were produced and they were

great. Could they have been improved even further? Sure, but I was not experienced enough at the time to form an opinion.

Some of the fine commercial color prints we made could be considered "art."

In order to make a print for the American Airlines account, the Dye Transfer proof print would be placed about 30 feet away, down at the end of the hall.

We had to see the effect it would have on us. The print was eventually to be used as a billboard.

We had to see if the contrast and color balance met the requirements for a great visual impact. It usually worked out great.

If you want to see some poor work, visit the labs that produce wedding and portrait prints in large volumes. Flesh tones are inadequate, and densities are usually off. The time required to render a great image is getting to be less and less. However, it still requires the eyes of an artist to make a quality effort, regardless of the medium.

Most prints that were made for the advertising agencies had to pass muster from varied sets of eyes. The images were constantly being re-organized and manipulated. We were the "necessary evil" that was required to make a great ad.

With the advent of today's digitized systems. I sometimes feel as if I were in Jurassic Park and I was one of the dinosaurs.

However all is not lost.

Enlarged separation negatives.

Are they worth the trouble?

How should they be used?

In my opinion, learning how to make accurate and repeatable enlarged separations is a necessity if any of us want to survive.

If you have 30 or 40 thousand digital dollars to play with, then disregard the following statements. Making enlarged separations can make all the difference in the world when it comes down to beautiful print making.

Don't even think of making contact separations from anything as small as 120 film or 35mm film.

The grain you will experience will not be the grain of the original, but the grain of the separation material.

What are the steps in making quality separations?

First of all, you must have one or two enlargers. It depends on whether you make prints for yourself, or are interested in becoming a service to those who do not want to make their own prints.

What are the advantages in making enlarged negatives? Many.

First of all, if a contact set of contrast masks are produced and added back to the transparency when exposing the actual separation negatives, the degree of flare will almost disappear. The flare factor alone, would make it imperative that enlarged separations be made.

The masks can be produced on Kodak's Pan Masking film, but care must be taken not to overexpose the mask or edge effects will occur. Color "correction" can be helped by using split masks or reverse masks, depending on the colors of the image.

The use of a fine Apo Chromatic lens will produce fringe free images. The light source must be incandescent. The color sensitivity of the material, is a crucial element to consider.

Whether the enlarger is a diffusion or a condenser model is not critically important. I prefer condensers, but that is my own personal choice.

The enlarger (4x5 or 8x10) should be solidly positioned on a work bench. The enlarger must be able to be locked and unlocked into position without any difficulty.

The enlarger carrier must be a registration carrier, preferably manufactured by Condit Mfg. The carrier that I suggest purchasing is the Cibachrome model with pins in all four corners. The use of a 4x5 (or larger) film punch, and a set of separation color filters that can be positioned above the carrier.

The easel must be a pin registered vacuum easel. Again, Condit can fill the bill.

The important thing to know is what kind of contrast will your particular enlarger produce with a given standard.

This is a measurable part of establishing the exposure and developing times for all of the steps.

This is done by placing a 21 step grey scale in your enlarger carrier, totally blocked off so that only the grey scale is accessible. Make a series of different projected exposures on the final material you plan to use, be it Matrix Film, or Cibachrome paper, or black and white paper, or anything else.

If matrix film is the choice, then after processing the matrix, dye it cyan and transfer it. Then examine the results through a red 29 filter.

Finding the two extreme steps where detail just begins, will indicate how

much detail you can expect from a similar negative or transparency.

Measure the same exact steps in the original grey scale so that a density range can be produced. This density range will be the "aim point" that you will try to reach whenever you make final negatives.

If you can make a contrast reducing mask that will eventually reduce the transparency to the proper range before making separation negatives, then the major part of making separations will be solved.

Making negatives to the exact size of the print will have many advantages. **The dark areas are usually lost when making prints from contact negatives and will be held when making contact prints from enlarged negatives.**

Read the above sentence a few times until it sinks in.

The contact negative, although sharp enough, will display an emptiness at the lower levels.

When this contact negative is placed into the enlarger, the escaping light through the "shadow" areas can cause flare.

If the dye transfer process survives, try making contact matrices via a large vacuum frame and a point light source. It will astound you.

Details that have always been hard to hold will suddenly appear as if by magic. This also means that if you begin with a transparencies in a small sizes up to 4x5, then all you will need is a 4x5 enlarger.

Small originals such as 120 and 35mm can be immersed in silicon "oil" in order to eliminate scratches and dirt marks, and especially, refraction of the image.

The resultant large separation negatives can be made as spotless as you can make them. This part is up to you. You must know how to keep a clean work area.

Finding the correct exposure for the image being placed on a large sheet of film is quite simple. I use an easel meter to read a specific area of the projected image. I then adjusted the *f* stop until the reading matched the standard reading that I had established.

The exposures are now the same as they were for the test. The results will also be the same.

The highlight masks can be built into the principal masks. A final "specular" highlight mask can be added to the large separations when exposing the matrices.

The material for this special mask could be any litho film.

Obviously, accurate registration is an absolute necessity. Cutting a Rubylith mask to act much like the leaves on an easel will help produce clean white backgrounds around the image rectangle.

Of course, the major advantage of the Dye Transfer process is the manipulative corrections that no other process has. Being able to add dye to a specific area on a clean matrix emulsion and then transferring it for a second time can alter the appearance of the image. This is a normal function of making high quality Dye Transfer prints.

The wave of new scanners and workstations continues at a record level. Almost every company involved with manufacturing something photographic has embarked on a new direction. The only photo magazine that relates to the standard photographic processes is Camera and Darkroom.

The rest have all gone along with the new direction. So be it. Until recently, most photographic images seen in galleries have been produced by conventional methods.

However, the EverColor Corp. is producing great color pigment images for

some very prestigious clients. I think the climate has changed enough for those who do not want to make their own prints to examine this new company. The best part of the company is it's president, Bill Nordstrom, a master printer.

This "master printer" is the most important element in any lab that performs for the photographic audience. I don't care if the process is digital, hands on, one hour mini lab or an enthusiast in his cellar or garage making prints, it is in the result.

Can any process produce great results? Certainly, but the better the printer and the better the process, the better the chance of having the results be considered "art."

As I was growing up in this fascinating world of color, I was reminded that most "artists" never gain wealth for most of their lives. Even the great Ansel Adams never became "rich" until the last few years of his life. But being rich with monetary gains is not the goal of fine artists.

Being rich is a realization that his work is appreciated. However, a few bucks wouldn't hurt.

I have contacted Reece Vogel, a young man that purchased the coating system from McGraw Col- orgraph, the company that

used the color carbon tissue for the Carbro process.

He is not very busy with the production of the tissues. He feels that the production of Carbro prints will not be too successful because of the influx of the scanners.

Books produced by Luis Nadeau, who is a cracker- jack at knowing the different old carbon processes has a book entitled "Modern Carbon Printing" which details formulas and methods. It is full of information. It is obtainable from

**Light Impressions Magazine,
439 Monroe Ave.
Rochester, NY 14607**

If you have a darkroom, you owe it to yourself to get a copy and experiment. I have a hunch that this is how UltraStable got started. The exposing equipment can be purchased in used form for as little as \$400. This includes the vacuum frame and the ultraviolet light source.

My latest book "Masking" is available for \$40. plus \$3 for shipping.

Thanks,

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