

KEEPING PACE

A Monthly Newsletter Devoted to the Darkroom Arts

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Different Contrasts with Ilfochrome?

The difference in contrast in the new Ciba materials. Try as they might, the fact that lower contrast paper is being offered as a "saver" for images that exhibit too high a contrast, is not all that it is supposed to be.

This part of the lowering of the contrast has been going on for a long time. The first company to start this cycle was Dye Chrome Research, based in Florida. Their system was to change the overall bleach (which is really 2 bleaches in 1) back to the original formula ideas of Dr. Gaspar, the founder of the dye destruction process that eventually was to be known as Cibachrome. Dr. Gaspar was able to affect different results by changing the times in the black and white portion of the bleach, as well as the color portion of the bleach.

This was a difficult kind of "correction" as the results

were produced after many attempts to make a better print. It was very uncontrollable. So, Ilford has taken up the challenge and is trying to make everybody happy with different variation in the papers.

One thing that happens with the lowering of the contrast is the fact that it is almost impossible to predict the final results.

The whole idea behind the Cibachrome process was to be able to make a perfect print every time. Great expectations, but not too practical. For instance, every transparency that one person may see in one single day at a professional color lab (such as my lab in Los Angeles in days gone by) would see what it took to be involved in making top prints for the ad agencies.

Since each original transparency had its own density

range, and even more important, the eye of the printer had to be included, because of what he or she perceived as what was the correct density range of the print depending on its use as an advertising print.

Fine art prints are even more demanding. The unfortunate technician that has to make a print for a really good art photographer really has his work cut out for himself. The demands of a fine art photographer are unending. You know, if you ever made your own prints, that there isn't one technician that can make a print to please you all the time.

Since most transparencies are different, why change the chemistry or the paper, and just learn how to make masks that will bring the range of the print exactly to the range of the material of your choice.

Not everyone sees things the same, but a densitometer doesn't cheat. However, you still have the option to override the densitometer. This is known as "being in charge."

If you are familiar with my approach, you can see where it makes sense to have your own desired density range and make the transparency fit the requirement. **Remember, you still have eyes and emotions. You may want to add or subtract more contrast to the "look" of a print. You are in charge.**

Some of you are obsessed with the glossy paper rather than the pearl surface. I must admit that the glossy paper has a bounce that no other paper has, but I contend that the pearl surface is more accurate and certainly more forgiving. If your print has values that make it an important piece of work, and you make a print on the pearl surface, simply mount the print on a good firm professional mount board and forget about the base becoming too brittle with age.

The reason for masking, regardless of the contrast of the paper should be obvious. The loss of color saturation caused by lowering the contrast either at the beginning of the process (the paper) or at the completion of the print (the processing) is a heavy price to pay.

The saturation of color is the one really redeeming factor that sets Cibachrome prints apart from almost every other process.

When the contrast was lowered by the use of different chemicals, the loss of saturation was too high a price to pay. The reason was very obvious. The manufacturer was pleased with the color saturation. Changing the chemistry does not work. Curve shapes are affected and change the way a print should look. However, masking only changes the overall contrast and has no chemical effect on the colors. So even with the correction of the contrast, the colors still "pop" when the print is made correctly.

Then a photo sensitive glass (Corning) was introduced which really got me quite upset. Even if the glass did work, it was a monochromatic system. No chance for color improvement. The glass and the transparency were combined and were exposed to a strong light, such as many flashes of the strobe lights in order to make some sort of negative image in the glass. Then you had to rush and make a print because every time you exposed the sandwich of transparency and glass, the negative image became weaker and eventually was gone. Try this in a professional lab, where quality had

to be matched with deadlines. Especially repeat images.

I don't know of one lab (except for those who have taken my course) that is competent at making masks, There certainly must be a few. However most do not know how to or why.

Regardless. Some of the Ciba prints that I have seen in galleries are fantastic. Since I have not seen the originals, I can't say that they could have been made better or not. This is one thing I learned. The eye of the printer is the most important tool of all. Even if the knowledge of the process is baffling, the eye is the one redeeming factor that will force you to make a great print.

If a print looks bad, we make it over. Sometimes we are at a loss as to what to do, but we make it over until it looks better.

As you all know, Kodak is giving most of us a hard time. Among many other things, they stopped production of the Q-6C grey scale. However, I found a reasonable substitute.

Visit any lab that is processing E-6 chemistry and ask for a processed (and about to be discarded) E-6 control strip.

The grey scales do not match the Q-6C, but they don't have to.

Just use the 2 steps that are far apart, or as close to the original Q-6C as possible. It works. Use the monochromatic setting on your densitometer instead of the color selection because the grey scales are not perfect greys. But the scale is a useful tool that does work.

Some of readers have purchased very exquisite densitometers but in reality, all that is needed for the Cibachrome process is a simple black and white densitometer. However, if you have a good one, keep it. Remember, all you need to read are the deep areas and the high areas. You should not be concerned with what colors dominate the dark or light areas. Just the fact that they are dark is sufficient reason to be aware of the problems.

However, in the Dye Transfer process, we have a different set of circumstances. The need for a more accurate densitometer is more demanding. The dark areas are going to be separated and do need to be read and controlled more efficiently.

In the Ciba process, such control is almost impossible without much special masking. In the Dye Transfer process, it is part of the process.

Making pre-highlight masks needs the use of a Pan Litho film.

Kodak has a new Pan Litho film called Ultratec Pan Litho UHF film. This material works in the same fashion as any Pan Litho film but requires development in a special developer (Ultratec Tray Developer) which comes in a 2 1/2 gallon container ready to use. The developer lists for 29.90 from Kodak. It will cost more from a dealer. The costs seems high. It is a shame that Kodak doesn't reveal their formulas.

Perhaps the developer lasts longer than the other chemistry used to.

I am not aware if Kodalith A&B developer would work or not. Probably not.

If you plan to use the post Highlight masking system when making Cibachrome prints, color sensitivity is not a really important problem. You will be working with a color blind film such as Kodak's LPD 4. This film was originally intended for producing many sets of screened negatives that had to be sent out of town to different printers. It works wonders as a specular highlight system.

Could you ever be involved in making commercial posters or strip-ins?

Condit has produced a simple and very effective enlarger used for such purposes. He modifies a Saunders 4x5 enlarger with a color head.

The main ingredients are as follows:

A registering carrier with adjustable pins

The enlarger steadied by some sort of brace.

The double vacuum registering easel with a strong and powerful pump.

An oversized opening in the table top, usually with glass of clear plexiglass. placed table top high. The double easel which rests on the table top has a diffused glass as it's bottom. A color lighthouse is placed beneath the table top. and when a job requires a very accurate cut or strip from a small original the easel acts as a platform for copying any image up th the enlarger. . The original is placed into a 4x5 registering enlarger carrier with diagonal pins set into it. The enlarger must be able to be locked in place and made immovable.

Place the image in question, on register pins in the enlarger carrier.

With all things locked onto position, the next step is to produce a large visible image on the pin registered vacuum easel. When sized up, go dark and simply activate the vacuum easel and make a short exposure onto a fresh sheet of Litho film and process it normally in Litho developer.

After processing, place the dry sheet of film on a matching pin glass that rests on a

work table with a built in light box. Punch a sheet of Rubylith film and also place it on the same pin glass, and using a sharp Exacto knife, proceed to score a very tight cut around the image. This cut must be made with as much accuracy as possible.

When done, peel off the unwanted part of the image. This is now called a frisket.

This tight frisket is a tool used when trying to cutout details around small images. Make the image as large as possible and cut around that instead.

When you are through with the cutting and using opaque, place the Ruby alone on the same Vacuum easel as before.

Condit manufactured the vacuum easel with a unique difference. Since the bottom of the double vacuum easel is made out of diffused milk glass, this means that you can place a light source under the vacuum easel.

Why?

Replace the original negative in the carrier with a sheet of fresh unexposed Litho film such as Kodak's Kodalith Type 3 (4 mil..) Do not move anything attached to the enlarger. In fact, bolt it down so that it will not move unless you want it to. Do this in total darkness or in the proper safe light. Activate the vacuum system. Then turn on the light beneath the vacuum easel for the appropriate time, and you will

have exposed a new and smaller image in the enlarger carrier to the exact size it was before, with the very accurate and tight fitting frisket. **The enlarger has performed as a camera.**

Now, this tight fitting frisket can be placed over the original image and the background will be gone (or the opposite if necessary)

This new frisket can be exposed and reversed so it can be used to make a positive or a negative image. If you are producing a piece of fine art photographic print, and want to move a tree or a mountain in order to get a better composition, this is how it can be done.

I did this for accounts such as Marlboro and Ford.

Is this a gimmick?

Not on your life. If all you need is to make a small improvement on one of your images you may easily open up a whole new area for making a living. This is one field that is now being used by the new computer generated systems. This conventional system I just wrote about is far more cost effective.

Here is a task for you to contemplate.

A method of including colored lettering into a colored background without holding back the original exposure and thereby eliminating dark or black edges.

The common system is to make a black Kodalith of the lettering so that when the background color is exposed the lettering will not be affected. Then the reverse of the lettering is made and the lettering color is exposed and dropped in. Sounds simple?

The only thing wrong with this method is that the black hold out image will be seen along the edges of the lettering because there is always a possibility of the films changing size. All films do change size, regardless of the fact that polyester film is used as a support.

Here is a tip. Expose the entire area with the color of the lettering. Then add the black lettering hold back. Now expose for the background color. it works. No black edges.

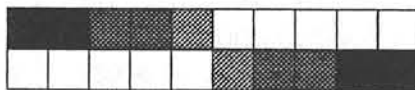
Making a set of simple isolation masks so that a specific area can be burned in, even with a different filter pack to change the effect on the scene.

This is a very important procedure to think about. Not all images are perfect, or do we accept what the film produces. We are supposed to be creative. Why not take an image and do something to enhance the image. I don't mean to make images look as if they were printed with MTV in mind . but with the creative ideas that we are all born with.

Every gallery would love to see innovative color printing instead of the same old images. Can you imagine the millions of images that were shot of Yosemite from the tunnel exit, and only one or two stand out as the most incredible shots of that canyon. The main reason is creativity. The shots were great, of course, but the printing made them even more memorable. This then, is the difference between calendar pictures and true fine art. The ability to dodge and burn are present in every printing form, but the ability to change the color of any part of the scene is tricky. A slight exaggeration and the prints will become garish.

I remember one incident, where three men left Pace Color and open their own company. This didn't bother me, as I always felt that each person had to make his or her own decisions. At this particular time in my color printing history, I had just completed forming a plan to isolate the different areas with the use of separation filters. The three men that left knew about my system, but never had it perfected. The corrections that were made had to be subtle, or they would look as if they belonged on a circus poster. Well, then new company managed to get hold of one of my favorite clients in San

Francisco. The image of a print they made consisted of 3 old time people dressed with the garments of the early 1900's. sitting in an early 1900 car. The sky was blue and the clothing was colorful. They made a print and overdid the isolation procedure. Then client was furious. He called me and asked that I fly to San Francisco to examine the print. When I walked into the room and glanced at the print from a distance of 20 feet, I knew what was wrong. I remade the print and got the client back. I learned a lesson from this experience. Never overdo anything. If you use my system of using two 21 step grey scales and place them at odds to each other, then making a series of exposures through the red, green, and blue separation filters using a Pan Litho film, you will be able to find the approximate exposure for each color.



The above illustration shows you when the exposure is just right. Remember, transparencies do differ, but with this system, you will be close enough. This works with the Dye Transfer process and the Cibachrome process, as well as any other reversible system of color printing or

film duplication.

Remember, don't overdo anything.

Why are highlight masks so important in color printing?

Every time you make a contrast reducing mask, a certain amount of the highlight area becomes flattened out. This is a fact of life. The only thing you can, and should do, is to try to prevent the loss.

There are a few ways to prevent the loss, The first step is to first make a highlight mask (a very short exposure of the transparency so that just a thin amount of highlight detail is exhibited.) For this chore, you can use Kodalith Ortho, Type 3. Place this processed sheet of film back to the transparency and then expose the contrast reducing mask (principal mask.)

In this way, the mask is built in and needs no further treatment. The film used is color blind, but since you are only using the very top portion of the highlight scale, you can get away with it. This process works well with Cibachrome, or any other process that only needs one exposure. **Are there pitfalls** connected to this part of the process? Yes.

If you make too strong a mask, you will wash out most of the detail that you are trying to hold.

If the mask is too weak, you won't get the desired effect. You could make a highlight mask and a copy of the same highlight mask using Kodak's LPD 4 and get a duplicate highlight mask that is much thinner and covers less area but with more definition. This second mask is known as a "specular highlight mask."

Use both highlight masks combined when exposing your principal mask.

A better way, even though it takes more time and requires registration equipment in the enlarger carrier, is to make a "highlight" mask using the same reversible material, Kodak's LPD4.

As I said, this material was produced for the purpose of being able to produce duplicate screened negatives. We use it in a different way. After we make our contrast reducing mask, and make a trial print, we make a contact exposure with the transparency (in register) on this reversible material so that when processed the film remains black, except where some exposure was made and a tiny streak of clear film is evident where ever highlights occurred. This will require a little time to experiment so that you can choose the correct exposure each time. It is mostly a visible thing.

Meters will not help.

The advantage to this procedure is that after you make an initial exposure on the paper (Ciba, Type R, Fuji R) you then cover the exposed image on the easel and in a dim room light, remove only the contrast mask from the carrier and replace it with the highlight mask and give the new sandwich an additional exposure. This part requires taste. Don't overdo anything. Your highlight area will suddenly "pop" into existence.

This procedure works with any process. Dye Transfer, Cibachrome, Type R (all kinds) and dupe transparencies.

However, original black and white negatives require the first method of highlight correction. Most original negatives in black and white should be self sufficient, but occasionally, a little help from a "add on" or "post Highlight mask" may help.

The shot that Ansel Adams produced of "Moonrise" has been dodged and burned in large proportions and areas, Then the highlights were cleaned out with a weak potassium ferrocyanide bleach and Hypo, and the dark areas were improved by Selenium toning. And you thought that it was all done in the darkroom?

How to make any dark area open up without affecting the entire image?

If you are working from a

transparency, and are making a Cibachrome print, the simplest way is to make a Kodalith exposure from your original transparency, process the film in a relatively soft developer. The Kodalith should be devoid of any detail in the shadow portions. Then add this sheet back to the transparency in the same fashion as you would with the highlight masks. This is an **added exposure** to the already exposed sheet on the easel. Again, this requires registration equipment in the carrier, and if you want to do it right, on the easel too.

How to make the necessary exposure determinations when using color sensitive pan Litho films?

The films I mentioned earlier, Agfa's P-911 or The Fuji 100 and even the new Kodak Ultratec UHF film will all work. The latter 2 require special developers. But the system of finding the "near perfect" exposure times for each color filter requires much darkroom time. Make a series of exposures using the two opposite ended 21 step grey scales. When the images meet in the center of the scale, the exposure is right. (See page 5)

If they overlap, or do not meet you will have to make the appropriate exposure changes. Do this for every color filter you want to use.

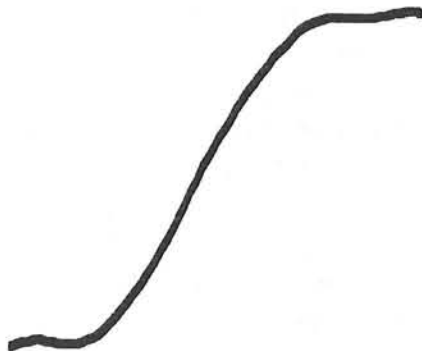
The three separation filters

are all that is really necessary, but you may have particular color you want to introduce, try it.

What does the term "straight line" reproduction mean?

It means that if a grey scale were exposed and processed on a sheet of continuous film, that the entire scale would be an exact reproduction of the original (turned around of course.) Unfortunately films do not respond in this fashion.

All films have a curve shape. In fact, the curve shape is more like an S than anything else.



This means that the film flattens out at both ends of the scale.

All films fall into this same pattern and problem. The digitized systems have a great advantage over the conventional enthusiasts, and this is **one** reason for the details of an original being so accurately captured. **Another reason is the lack of flare.**

Because of the way the images are scanned, flare

does not exist. We, on the other hand, make our images in two ways. Contact or enlarged. If we make a contact negative from a 2 1/4 transparency, the image will be as sharp as a tack, and exhibiting no flare, but the straight line problem will still exist. Then we take this new flare free negative and enlarge it to the print size. I don't care what size we enlarge it to, the flare factor is there because of the enlargement. The loss of the images straight line occurs regardless of how the negative is made and also when the image is printed onto a sheet of paper, or a sheet of matrix film, or any other kind of photographic material that exists. All photographic materials have this loss because of the inability to maintain a straight line reproduction of the original. The digitized systems are free from this dilemma. However, the final print is what we all see and the fact that there are faults with the photographic process is even more of a challenge to make a better image by making a great print.

In producing a Dye Transfer print, the production of the separation negatives is the place where the corrections for these losses are made. The highlight masks are made to help maintain some semblance of the original details

Remember, when you visit a

gallery, you aren't thinking about the loss of image because of flare or straight line deficiency. All of your attention is to the content of the print, the composition and the emotional response that occurs when the image is just right.

Color printing, like music, is an ever unending struggle for perfection. We will never stop learning what there is to know about music or art.

My days are filled with studies about the new systems on the market. Most fine art photographers are beginning to feel the pinch. John Warzonec, a fine Dye Transfer printer and great photographer from Massachusetts is going digital. He has a sizable amount of fine art contained in matrix films and uses these matrices to produce prints for galleries and personal followers. However, the antics of Kodak has forced him to make a change in his professional lifestyle and has decided to use the Ultrastable Pigment process as his print medium. I don't know how he is going to produce the fine art screened separations that are necessary for his process, but he must have a plan. Joseph Holmes of California also is planning to use the Ultrastable pigment process. He told me that he wants to make large images by making screened negatives from his excellent

Cibachrome prints. His plan is to make the prints in a conventional mode, then after having a print scanned and screened negatives produce to a large size, he plans to produce the pigment prints himself.

The plan makes some sense. He wants complete control. By making his complicated and much manipulated Cibachrome prints, all that is necessary to do is to make a straight copy of his own print and do his own exposing of the pigments and then doing his own transfers of the colored pigments.

He already has a fine finishing area in his studio and I am sure that the final prints will be exhibited in a very fine fashion.

I received a call from Dr. Patterson yesterday. He wanted me to know that he is planning to send out some manufactured matrix to specific labs so that they can assure him of the success of his project.

The announcement may be newsworthy, but with the amount of time that it has taken to get to this point, many former Dye Transfer enthusiasts have given up the process. I am dismayed about this.

The large commercial labs that dominated the Dye Transfer field because of the need for their products have

just about disappeared from view, The only ones still intact are those that made sure that the fine art field was their main client list.

My old buddies in San Francisco, "Frog Prince labs" " has joined forces with another great commercial lab and are producing some of the finest Dye Transfer prints in the country. Their client list reads like a "who's who" of the fine art world. However, even Frog Prince is going digital.

Every commercial lab must do so if they want to stay in business. But those of us who are interested in turning out great art with conventional means are still here. The high cost of going digital is only the beginning of the problems.

The computers are changing so rapidly that before you know it, your stuff is obsolete.

Leasing is one way to stay out of trouble, but this means that you will never own your own equipment.

Incidentally, if you need a catalog that lists all of the new Graphic Arts films and materials from Kodak, call them art 1-800 242-2424 Ext 724 and ask for the H3-85 Catalog. It is free. If you want a free demo pack of two of their most popular films call 1-800-336-8686-Ext 69.

These films are great. Try them.

It is a shame that all of the new and exciting changes in the field of photography are occurring in the digitized systems.

It has been years since a new photographic paper has hit the market place.

The feud between Kodak and Fuji has been going on for years, and it looks as if the Fuji material has the upper hand with their brand of Ektachrome film. The grain is finer and the colors are exciting. But I feel that Kodak is letting too much go by. They need to give all of us a shot in the arm. The conventional field has been quiet. The processors are ever improving but the quality of their work seems to be centered on the mini labs. I am working part time for a lab here in Las Vegas. They are an up to date conventional lab that has a foot in the door with their digitized systems.

My job is to train some individuals in the art of "photocomposition" using conventional means. I have done this most of my adult life.

There still is a need for the conventional approach even in the commercial field.

Thanks

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