

HOW TO COLORIZE YOUR B&W PHOTOGRAPHS

Imagine how a cave dweller felt with the first urge to colorize a charcoal drawing on the cave wall. After all, adding some color would show the beast closer to reality. How about a yellow tiger or blue sky! In the late 1700's when photography was first introduced, it was a primitive form of a chemically-produced, monotone image. This brownish-black and white type of artwork was a great invention. It allowed man to produce an image of what something really looked like.

Prior to photography, painting and sculpting was the interpretation of the artist and not always a real view of how a subject actually appeared. Much like the caveman, photographers and artists set out to find ways to colorize their new pictures to make them look even more real than just plain monotone. The first colorizers used whatever they could find: green tea, beet juice, boiled flower petals and almost anything that soaked into or would stick to the surface. Lips were red, cheeks were rosy, trees were green. Who could argue with that.

Soon, photographers and artists realized that all this colorizing was a lot of work, expensive, could not be reproduced and was not as accepted as just plain brownish-black and white pictures. Hand coloring remained a novel process for those who could afford it or wanted to take the time to do it. During the 1800's, photography grew quickly in popularity for recording events, family portraits, and the scenery of a rapidly changing world.

Around 1930, inventors using new technologies began creating forms of reproducible color films and photographs. In the 1950's, color photography, as we know it today, became the favorite for taking pictures of everything. Applying color to photographs was pretty much reduced to repair and retouching. However, a few people still accepted the colorizing of black and white photographs as an art. In the last 30 years or so, books have been written, classes taught, and videos have been made on the time honored art of hand coloring of pictures. Colorization, from simple tinting to multiple layers of dye and surface covers, has become more popular than ever. Even old black and white movies are being colorized to satisfy public demand.

Colorizing Photographs will introduce you to some basic forms of the art that are current or were done more than a century ago. The methods used can cost as much or as little as you choose, in both money and time. Colorizing photos is a hands-on experience that can become a lifelong hobby or could lead to a rewarding career. Let's get started.

Tinting

Simple one-color, liquid tinting is the easiest way to learn the basics of colorizing. We will demonstrate several materials used to change the overall color of a black and white photo. You will need:

a) A picture

Select a medium contrast black and white picture made from a black and white negative. Find one with good detail in the shadows. And, of course, be sure it has good composition. (A special note: Be sure that your printer uses black and white paper for your photo. Some labs may use color paper to make your black and white picture. If this happens, your picture may not tint or tone with some materials.) Use a picture from a negative that is yours. Do NOT start with a one of a kind photo that you cannot reproduce. It is best to start with glossy prints for all your learning processes. Try to keep the surface clean and free of fingerprints. Your fingers leave an oily film and can prevent some materials from doing their job. If you do get the print dirty, simply wash it in mild soapy water, rinse it for five minutes and hang it up to dry before going any further.

b) Trays or containers

You will need something to put the picture into while it is being colored. You can get by with two containers or trays for most projects. Do NOT use glass dishes. Glass breaks easily. Do NOT use aluminum pans. Aluminum may react with some of the chemicals used in toners. Photographic trays can be purchased from a local photo supply dealer. To keep expenses down, visit the housewares section of a department store and purchase plastic drawer organizers or plastic pans. A dishpan can be used for larger sized pictures. Use plastic or rubber type containers. Visit your Goodwill Store or attend a yard sale.

c) Other helpful items

Rubber or latex gloves will keep your skin from being tinted when using dyes or toners. Wear old clothes or aprons that will not be damaged if they become stained. Use old newspapers under the trays to catch drips and spills. Running water for washing your prints is required. A thermometer can be helpful but not required. Photo thermometers can be purchased at a supply store. For best results, most photo work can be done at about 70 degrees F. Using any cheap thermometer will work just as well. You

will need some way to hang your photos when drying. Clothespins and some string work well.

d) **Coloring material**

You can color your first print with some of yesterday's coffee. (Don't laugh until you try it.) Cola types of soda pop can be used, as well as ordinary food coloring, tea and Easter egg dyes. You can purchase photo coloring material at a photo supply store with such brand names as Kodak, Edwal and Marshal. These are commercial products designed only for use in photo colorization. Sepia toning is the easiest of the commercial colorizers to use. It gives the old-time brown tone to a picture. Many other colors are available.

Let's tint that picture with some coffee. Start with two copies of the picture you have selected for colorizing. Put some newspapers down and set the trays on them. Pour some coffee into one of the trays and some water in the other. Coffee and water can be around 70 degrees F or room temperature. Cut one of your black and white pictures into four equal-sized pieces. Set the other one aside for use later as the final product. Place all four pieces in the tray with the coffee. The pieces may try to float. Try to keep them submerged. After five minutes, remove one of the pieces and rinse it in the water for one minute. Hang it up to dry. Remove another piece and rinse at the end of 10 minutes, another at 15 minutes, and the last at 20 minutes. After they have all dried, you can examine them to see which time gave you the best result. Soak your other print for the time you like the best. You can experiment by using different brands, strengths and times. Your coffee-colored print will give a general appearance of the old time brown tones.

Tinting with cola or tea can be done in the same way as the coffee. However, the end result may take longer. Example, to get a reasonable color from Diet Coke may take about six hours. Pepsi seems to work faster. Brewed tea can give results in about an hour, where instant tea has taken four or five. It can be fun to try different refreshment liquids. I have never tried Worcestershire sauce....

Food coloring and Easter egg dyes require paying a little closer attention, especially if you wish to repeat a particular tint at another time. These dyes are very concentrated and their ability to work depends on both dilution and time being considered. Start with the same set up as you did with coffee. Let's try tinting with blue. Put water into the first tray. Add 10 drops of food coloring. Stir it around a little to mix it evenly. Run the 5, 10, 15 and 20 minute tests again. Check for results. If you find that the color is too dark, reduce the color to five drops. If it is too weak, increase to 20 drops. You may

have to experiment to find the most pleasing results. When you have found the desired tone or tint, make some notes so you can repeat the process. There are no rules for results here. Just some suggested starting points. Try mixing colors. If you are using egg dyes, do NOT put vinegar in as some directions suggest for coloring eggs.

Use commercial photo coloring products. Sepia toning is a very simple process for obtaining the old-time brown tones in photos with nostalgia themes. It is the most requested toning provided by photo finishers. This process differs from those using dyes and coffee-type tints. Dyes simply soak into the emulsion of the photo and stain the surface. Sepia and other types of commercial toners cause a chemical reaction with the silver in the print. The final color or tone of the print depends on the chemical make-up of the toner. Sepia toning uses sulfur to produce the brownish color when introduced to the silver in the paper. Other toners can produce gold, cobalt blue, reds and many more. When using chemical type products, it is VERY important to read the directions over a few times to avoid mistakes and accidents. For example, when using sepia toners, you will notice the characteristic sulfur smell of rotten eggs, so use this in a ventilated area. Follow the directions. Do NOT deviate.

Your first time using sepia toning will be quite an adventure. You will need three trays for this process. The first tray will be for the bleach. The second for the toner. The third should be in the sink and have running water available. Remember to use newspapers, old clothes and latex or rubber gloves. It may also help to have a large tweezers or a photo tong with which to handle the print.

Each manufacturer may use a different method of packaging its material. If you use Kodak, it will be a powder mixture in two containers. Mix with water according to directions. Have some containers ready to put the bleach and toner into. I use plastic, one liter soda pop bottles for my one-quart toner kits. Since most toners can be reused, mark the bottles for future identification. After the dry chemicals have mixed thoroughly, pour each into a tray. Check the directions for suggested times in the solutions.

First immerse the black and white print into the bleach. Now is when the drama starts. You will soon notice that the picture is starting to fade. Do NOT panic. It is supposed to do that. It means that the chemical reactions are taking place. The bleach will do its job in several minutes. Follow directions. When the bleach has finished fading most of the detail, remove and rinse with water according to directions. The rinsed picture is then placed into the toner. More drama. The toning starts right away.

In a minute or so, the process is completed and you will have your first sepia-toned print.

Some toners suggest using a fixing bath after toning. If yours does, you will need to have some on hand to finish the process. Fixer can be purchased from the same photo supply store as the toners. Rinse the picture and hang it up to dry. You can experiment with different times and temperatures to control the results. Less bleaching time will produce a less-toned picture. Be careful, too much bleaching time and you can lose detail. After sepia toning, try some of the other brands or colors.

What to do with your tinted print. You can use your tinted print as the final product or it can be used as the base for further detail colorization. If you choose to use it as the final product, it is a good idea to coat it with something to protect the surface and prevent dyes or stain material from fading. Chemical reaction toners are quite stable and should not fade when unprotected. You can spray coat the print with photo lacquers such as Suregard or McDonald. These are rather expensive but are designed for use with pictures. They dry very fast and leave a nice smooth finish. Photo lacquers come in several types from very glossy to dull or matte.

To start with, you may want to purchase a spray can of regular quick-dry lacquer from a hardware store. It will cost less and give fair results while you are learning the processes. When your photo has been dried and coated, frame it and hang it up for others to see. If you choose to do further detail colorization to your tinted print, do NOT coat the surface. Simply protect it from becoming soiled or finger printed, then go to the next section on "Detail Colorization."

Detail Colorization

Colorizing a black and white photo uses several different materials for obtaining the color. You can choose from photo dyes, pastel chalks, color pencils, photo oils, food coloring, water paints, acrylic paints and many other strange materials. To begin with, keep in mind that dyes, oils or liquid colors of any type do their coloring by soaking into the emulsion of the print. They ADD density to the already existing tones. Pencils, chalks, and acrylic paints stay on the surface of the picture to do their colorizing. If you choose to do multi-layer colorizing, you must apply the soak-in types first.

Once the liquid-type color is in, you can build the surface any way you choose. Soak-in type color can be applied with brushes, Q-tips or cotton balls. Choosing a brush for photo work can be a tedious affair. I recommend a good quality brush. Grumbacher or Windsor-Newton are two popular brand names. A cheap brush is likely to loose

hairs and not hold the liquid well. Good brushes can be found at an art supply store. If you are going to use cotton balls or Q-tips, use real cotton. You will need to make a decision on the type of colorizing you prefer. Let's get started.

Group #1: Photo dyes, water colors, food coloring

These color materials are concentrated and will need some dilution. I suggest you use distilled water for this purpose. Photo dyes, like Retouch Methods, Kodak and other brands, can be purchased at a photo supply store. After you have selected a picture to colorize, decide on a color to start with. Let's say that you have an outdoor scene with some grass or a leafed out tree. You will need something to hold your diluted dye. Artists' wells can be purchased from an art store or you can make your own from the bottom of a styrofoam egg carton.

For starters, put four drops of concentrated color in the well. Add about a teaspoon of distilled water. This will give a good ratio to begin with. As you become proficient, you can make the mix thinner or thicker to match what you are doing. I prefer to have a thinner mix and apply it more often. I find it is easier to control a color build-up than to have too much on the first application.

Make sure your print is dry and clean. Now, dip a Q-tip into the dye. Apply the dye to the surface area you wish to colorize. A Q-tip of dye goes a long way. There is no need to build a pool of color. After the application, put down your Q-tip and allow the color to soak into the emulsion of the photo. In a few minutes, the surface will dry and you are ready for the next application. You can now add a second coat, or more, for dense color. Adding a different color will change the hue. For example, putting some yellow over the green you have put on some grass may make the scene look a little more sunny.

You can do the same procedure for a large area using a cotton ball. A ball full of dye can cover a 5 x 7 print. For small areas or more detailed work, you will need a good retouch brush. To start with, I suggest a size 5 and a size 5/0. A good brush will allow the dye to well-up in the hairs so you can control the application. A size 5 is good for most detailing. If you are going to do eyes, you will find the 5/0 a good size for sharpness. Mix away, do build-ups and experiment with density. Have fun.

Group #2: Photo oils, oil paints, acrylic paints

These types of colorizing materials are applied to the surface of your picture by brush, finger, Q-tip or any other method you choose. It is much like painting on a plain canvas, except here you already have your sketching done for you. You can paint a whole picture or just part of one. Try putting color in certain areas and

leaving the rest plain black and white. Your print will probably start to curl with an application of paint. Before starting, tape the corners down to a piece of flat cardboard. Avoid corrugated cardboard, as the ribs may end up showing through the dried surface.

Group #3: Chalks and pencils

You can apply these forms of colors over the already tinted or dyed prints, or over plain ones. You must, however, prepare the surface for applying pencil and chalk. This procedure is called adding “tooth.” This is done by spraying the surface with a retouchable material. This material creates microscopic hills and valleys for the pencil and chalk dust to settle into or “bite” onto. Photo retouch spray made by McDonald or Suregard is made for this purpose. You can also use artists’ tooth from an art supply store.

First, find a well ventilated place to do your spraying. Most sprays are flammable and also harmful if breathed. Be careful of over spraying. Coat the surface as stated in the manufacturer’s directions. Once the tooth has dried, you can begin your application of material. A light touch is all that is needed. Once you have applied a color to an area, you must respray it for another coat. You cannot put one color on top of another without adding more tooth. Don’t be surprised if some of your color seems to go away during respraying. It is absorbing the pencil or chalk dust.

It takes a lot of practice to be a good photo chalk artist. Good artist’s chalk or pencils can be found at an art supply store. Avoid colored pencils used for writing or graphic work—the lead is too hard and will not adhere to the tooth. You can also put chalk or pencil on a painted surface photo. Just apply the tooth and use your imagination.

Dealing with “red-eye”

This is how most photographers first become involved with retouching dyes or pencils. You won’t find red-eyes on black and white photos, but I think it deserves a mention anyway. To solve the problem on your color photos will be a real triumph in your skill area. By using a black dye and your 10/0 brush, apply just the smallest amount of it to the center of the red-eye.

If your first application is not enough, add just a tiny bit more. Do NOT try to recolor the eye. Your goal here is to fool the person viewing the photo. The method works the same whether the eyes are human or animal. A small amount of red will not be noticed unless someone is looking at it through a magnifying glass. If you don’t have regular photo dyes, you can mix food colors to get a color close to black: mix one drop of red with two of blue

and green. You can use pencils to color in red-eyes by coating the print with a tooth and then dotting them with very sharp ends. You may have to use two coatings of pencil to achieve a good result. The red eye retouch pens from photo stores work very well, too.

The Finishing Touch

It is necessary to put a protective surface of some sort over your finished picture after colorization. The colorizing and tinting you have added to your black and white pictures may fade from ultraviolet light. Chalk and pencil need something to make them permanent. Photo lacquer is the most common. Photo lacquer can be purchased at a photo supply store. Art Surface from an art supply store is also popular. You may use regular clear lacquer from a hardware store. But, beware that regular lacquer does not dry as quickly as photo lacquer and may cause dust to stick to your picture that collects during the drying time. Putting your artwork in a frame and covering it with glass works well, too. You can apply brush-on clear acrylic to the surface. This is a real nice effect that can be made to resemble an artist’s brush strokes. There are some fancy photo sprays that can give pebble or textured surfaces. These can be found at photo supply stores.

A Final Note

Always practice on a photo that can be remade. NEVER experiment on a one-of-a-kind. Retouch old photos only after you have made a quality copy. Good work requires time and patience. Take some time to learn your new skills well. Photography can be a very enjoyable hobby or very worthy career.

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