



Frog Hollow Vermont State Craft Center Standards Criteria for Photography

Frog Hollow standards for work in Photography require that the photographer maintains complete control over work. They must be the sole creator of images produced, whether by traditional film materials or by digital methods. The photographer must not only show a high proficiency and knowledge of processes but also a unique vision and style and a significant body of work (12-24 pieces). At least two of the pieces submitted for jury should be framed. The juried photographer must be able to reproduce images as presented.

Criteria for Juried Photographers

Frog Hollow juried photographers must maintain full control over their images. They can use traditional film and chemical darkroom or digital processes. The photographer must be knowledgeable and proficient in all aspects of image capture, process and presentation and be able to reproduce all work presented. Specialty processes and alterations made to original images to include photo collages, composites, toning, tinting, and hand coloring techniques are acceptable as long as the photographer owns the copyright to all images used and performs the work. Professional Commercial labs can be used for printing in cases where specialty equipment, unique processes, or large scale sizes are required as long as original film or digital files created and managed by the photographer are used as masters. All photographic prints from conventional and digital processes must be produced using acid free archival materials. Prints should be presented with archival materials by mounting, matting and or protected with clear bags, shrink wrapping or framing. Frames should be of quality metal or wood construction and compliment the photography. Alternative display methods will be considered on an individual basis as new methods evolve. Photographers are expected to sign photographs and label all work with information about themselves, materials used, processes, and archival qualities. Examples of current photography prints are; silver, hand tinted silver, platinum, palladium, dye-transfer, carbon pigment, C- print, R-print, ink-jet, giclee, and iris. Open or Limited edition prints should be specified and if the later numbered by traditional standards. Frog Hollow photographers can produce offset printed cards of their work, which are not archival for sale in the galleries as long as the image quality is consistent with their archival prints. Frog Hollow photographers work must demonstrate high technical proficiency with attention to composition, design, aesthetics and presentation. The work must show more than just technical proficiency or a reproduction of a recognized style. Photographic images should express the creator's personal style and demonstrate that they can pre-visualize, process to state of the art standards, and complete lasting work with exhibition quality and a visual impact.

Photography Glossary of Terms

Photography – is the process of making pictures by means of capturing light on a light-sensitive medium, such as a sensor or film. Light patterns reflected or emitted from objects are recorded onto a sensitive medium or storage chip through a timed exposure. The process is done through mechanical, chemical or digital devices known as cameras.

Silver Print – The Gelatin-silver process is the photographic process used with currently available black and white films and printing papers. A suspension of silver salts in gelatin is coated onto acetate film or fiber-based or resin coated paper and allowed to dry (hence the term dry plate). These materials remain stable for months and years unlike the 'wet plate' materials that preceded them. Once development is complete, the undeveloped silver salts must be removed by fixing in sodium thiosulphate or ammonium thiosulphate, and then the film or paper must be washed in clean water. The final image consists of metallic silver embedded in the gelatin coating.

Platinum and Palladium Print –Platinotype is a monochrome photographic printing process, based on the light-sensitivity of ferric oxalate. Ferric oxalate is reduced to ferrous oxalate by light. The ferrous oxalate then reacts with platinum (II) (or palladium II) reducing it to basic platinum, which builds up the image. William Willis discovered the process in 1839 and the first platinum paper reached the market in 1881, produced by the Platino-type Company, a firm founded by Willis in 1879. When Willis invented the process, platinum was relatively cheap, but it quickly became more costly starting in 1906. In 1907 platinum had become 52 times more expensive than silver. Eastman Kodak and most other producers stopped fabrication of the paper in 1916. Russia controlled 90% of the world platinum supply in World War I and all available platinum was used in the war effort. Due to the shortage of commercial paper and high cost, photographers experimented with palladium paper and platinum-palladium mixes. Platinum paper has continued in use until the present, interrupted only by the world wars. Due to the unavailability of pre-coated sensitized paper, all platinum/palladium (Pt/Pd)printing is done on paper coated by the printer. The light sensitive chemicals are mixed from powdered basic chemicals, or some commercially available solutions, then hand applied with a brush or a cylindrical "pusher". Many artists achieve varying effects by choosing different papers for different surface characteristics, including vellum, rag, rice, among others - even silk. On the collecting market, Pt/Pd photographic prints often sell for many times what a similar silver gelatin print would sell for. By varying the amount of Pt vs. Pd and the addition of oxidizing chemicals such as hydrogen peroxide and potassium dichromate or potassium chlorate, the contrast and "color" of the final image can be modified. Because of the non-uniformity of the coating and mixing phases of the process, no two prints are exactly the same, adding additional "cachet" to a Pt/Pd print. The inherent low sensitivity of the process is due to the fact that the ferric oxalate is sensitive to ultra-violet light only, thus specialized light sources must be used and exposure times are many times greater than those used in silver-based photographic processes.

Dye-Transfer Print –Carbon Pigment Print –

A carbon print is a photographic print produced by soaking a carbon tissue in a dilute sensitizing solution of potassium dichromate. The solution also consists of carbon, gelatin, and a coloring agent. The process was created as a result of print fading in early photographic processes, and was patented in 1864 by Joseph Wilson Swan.

An Overview and History of Carbon (Pigment) Printing

The carbon process, initially a black and white process using lamp black (carbon black), was invented by Alphonse Proin in 1855. The process was later adapted to color, through the use of pigments, by Louis Duos due Huron in 1868. Carbon printing remained commercially popular through the first half of the 20th century. It was replaced over time by the dye-transfer, chromomeric, dye-bleach (Coachwomen) and, now, digital printing processes. The efficiencies gained through the more modern automated processes relegated carbon printing to the commercial backwaters of the latter half of the 20th century. It is now only found in the darkrooms of the rare enthusiast and a few exotic labs. Carbon printing relies upon the ability of gelatin, when sensitized to light by a dichromate, to become insoluble in water after exposure to sunlight, or its modern equivalent (UV). Three successive layers of gelatin, containing first yellow, then magenta and finally cyan pigment, are, one at a time, exposed, aligned (registered) and then transferred onto a white opaque support (substrate, base or carrier) and processed in warm water (100 °F to 105 °F). A fourth layer of black was added later on to improve density and mask any spurious color cast in the shadows. The unexposed areas, which remain soluble in warm water, are washed away, revealing, according to the inverse of the exposure, the underlying white support. This creates a bas-relief effect of varying texture and finish on the surface of the print that is the unique signature of the carbon process. Each color carbon print requires three, or four, round trips in the darkroom to create a finished color print. An individual, using existing pigmented sheets and separations, can prepare, print and process enough material, 60 sheets including the support, to produce about 12 - 20" x 24" four color prints in a 40 hour week.

- It should be noted here that the carbon process is typically used to produce;
-Mono-chrome prints, usually B&W, but often sepia, cyan or any other preferred color.

- Duo-chrome (duo-tone) prints, an effect many printers are familiar with, using complementary or associated colors to their best effect.

- Tri-chrome prints, a traditional full color print made by layering Y, M & C pigment sheets.

- Quadra-chrome prints, basically the same full color print as the tri-chrome with the added finishing layer of black (K) to add density and mask spurious color in the shadows.

- That noted, any combination of layers, in any color, are possible to achieve whatever ends the printer desires.

- It's also important to mention here that there are two primary techniques used in carbon printing, single transfer and double transfer. This has to do with the negatives (separations) being right or wrong reading and the image "flopping" during the transfer process.

Because the carbon printing process uses pigments instead of dyes, it is capable of

producing a far more archival stable (permanent) print than any of the other color processes. Good examples of the color stability of pigments can be found in the paintings of the great masters, the true colors of which, in many cases, have survived all these centuries. A more contemporary example of the color stability of pigments is found in the paints used on automobiles today, which must survive intense daily exposure to very harsh lighting, under extreme conditions. The useful life of many (but not all) pigment formulations has been projected out to be several centuries and beyond (perhaps millennia, look at the tombs of the Pharaohs, the frescoes of Pompeii and the cave paintings of Alsace), often being limited only to the useful life of the particular support used. Additionally, the use of pigment also produces a wider color gamut than any of the other color processes, allowing for a greater range and subtlety of color reproduction. Though carbon printing always has been, and remains, a labor intensive, time consuming and technologically demanding process, there are still those that prefer the high aesthetic of its remarkable beauty and longevity over all other processes.

C-print or Kodak C-print - is a common brand name for a "color coupler print" or "digital color coupler print" and refers specifically to a photographic print made from a color negative using the same extremely light-sensitive silver salts as found in silver gelatin prints, except the silver salts 'couple' with colored dyes to form high-resolution color images rather than black and white R-Prints –

Inkjet printers - are a type of computer printer that operates by propelling tiny droplets of liquid ink onto paper. They are the most common type of computer printer for the general consumer due to their low cost, high quality of output, capability of printing in vivid color, and ease of use.

Giclee Print – (IPA: /i_kl/ or /di_kl/, from French /i_kle/), commonly pronounced "zhee-clay," is a generic term for the process of making fine art prints from a digital source using ink-jet printing. The term, from the French verb *gicler* meaning "to squirt, to spray", originally applied to fine art prints created on Iris printers in a process invented in the early 1990s but has since come to mean any high quality ink-jet print. The word "giclee" was created by Jack Duane, a printmaker working in the field, to represent any inkjet based digital print used as fine art. The intent of that name was to distinguish commonly known industrial "Iris print" proofs from the type of fine art prints artists were producing.

Iris printer - is a digital output printer created by the Iris Graphics company of Bedford, Massachusetts. The first Iris printer, the model 3024, was introduced at the September 1987 "Lasers in Graphics" show in Miami. Iris printers are used to create full color faithful proof prints for print jobs created in the digital realm from process such as digital scanning and desktop publishing. Prints produced from an Iris printer are commonly called "Iris prints", "Iris proofs", or simply "Iris".

Fine art reproduction

Iris printers have also been used in the production of fine art prints since the early 1990s. An early developer of the technology in the fine art field was Graham Nash of the band Crosby, Stills, Nash, and Young. Nash was introduced to using Iris printers for photo reproduction when the original negatives to some of his photographs were lost in shipment. An associate came up with the idea of scanning contact sheets of the photos and outputting them to an Iris printer. Nash was so pleased with the results he, along with

his road manager, Mac Hulbert, decided to develop further methods to use the printer to make continuous tone print editions of Nash's photographs. Using image management software written by Nash and Hulbert and a hand-built scanner, they modified an IRIS 3074 and developed a method to print high-quality black-and-white photographs on various paper substrates. Since Iris prints were designed for prepress proofing where the output is usually discarded early Iris prints were relatively fugitive and tended to show color changes after only a few years. The use of newer inks and printing substrates have extended the longevity and light fastness of fine art Iris prints.

The Iris printer's connection with industrial printing meant the name "Iris print" was synonymous with a disposable prepress proof. Nash and Hulbert came up with the name "dig graph" to try to distinguish their work from the industrial process. Another generic name "gale" is also used for this type of print. Some artist and fine art printers still prefer to call prints produced on an Iris printer an "Iris print".

Toning – is any chemical process used to modify the color of monochrome photographic prints? Different toning processes give different colors to the final print. In some cases, the printer may choose to tone some parts of a print more than others. Some toning processes can improve the chemical stability of the print and allow it to last longer. Other toning processes can make the print less stable. Most toners work by replacing the metallic silver in the emulsion with a silver compound such as silver sulfide (Ag_2S). The compound may be more stable than metallic silver and may also have a different color or tone. Many early prints that exist today were toned with sepia toner. Toner also can increase the tonality of a print. This increases the range of visible shades without reducing contrast. Selenium toning is especially strong in this regard. Many toners are highly toxic. It is extremely important that the chemicals are used in a well ventilated area. Do not sniff a chemical to identify it unless you are sure that the chemical is not toner. Wear proper gloves and face protection. Some toners are carcinogens.

Tinted photographs - are made with dyed printing papers produced by commercial manufacturers. A single overall color underlies the image and is most apparent in the highlights and mid-tones. From the 1870s albumen printing papers were available in pale pink or blue and from the 1890s gelatin silver printing-out papers in pale mauve or pink were available. There were other kinds of tinted papers as well. Over time such coloration often becomes very faded.

Hand-coloring - refers to any of a number of methods of manually adding color to a black-and-white photograph or other image to heighten its realism. Typically, watercolors, oils and other paints or dyes are applied to the image surface using brushes, fingers, cotton swabs or airbrushes. Some photographic genres, particularly landscapes and portraits, have been more often hand-colored than others, and hand-colored photographs have been popular enough that some firms specialized in producing them.

Digital master - is an image, PDF file or another digital asset created for the purpose of reuse and re-expression. For images it is the digital analogue to a photographic negative. It is the master from which variations for specific uses can be derived. A carefully crafted digital master is a valuable asset that can be repurposed and reused over period of many years.