An Introduction to Experimental Photography

The Photogram

The photogram has a similar concept to that of an X-ray. Usually, objects are placed directly onto a photo-sensitive medium; in most cases this is photographic paper. The paper would be exposed to light and developed to reveal a sort of captured, reversed shadow or silhouette. The result relates to the laws of photography: the areas of the paper that received light appear darker than the areas that did not receive any light.

The photogram is a technique of lens-less photography; although in some circumstances the technique is mixed with straight photographic prints. One example of this is the Vignette. This involves the placement of an oval cut out above the print during exposure. A corresponding oval is then laid on the photo and with exposure an image is revealed in the centre with a black background.

Hand Colouring

Hand colouring refers to the process of selectively applying dyes to photographic prints with a fine brush. Obviously this can provide great emphasis if used effectively on black and white photos.

Solarization and the Sabattier Effect

Solarization was discovered by a French photographer named Armand Sabattier in 1862. It was an accidental discovery made by the unintentional severe over exposure of a print.

Solarization is the partial or total reversal of the tones in a photographic image; caused by vast over exposure (it takes approximately 1000 times as much light used during an average exposure to solarize an image).

The term solarization is often inaccurately used to describe the partial reversal effect caused by fogging a photographic material with light; this is merely a brief exposure to light during processing. This method is accurately referred to as the Sabattier Effect.

I will be attempting to create effects similar to that of a solarization using the Sabattier Effect or Pseudo-solarization.

The main characteristics of the Sabattier effect are dark areas appearing lighter and light areas appearing darker – similar to a negative. Solarization prints have a unique, graphic, stylized look.

Best results are acquired when using images with sharp, high contrast, simple subjects and strong linear qualities.

The Cyanotype

Cyanotypes are a type of photographic print associated with their cyan-blue colour. A cyanotype is a very old method of photographic printing which gives monochrome results.

There are two main chemicals involved in the process:

1. Ammonium Iron 3 citrate
2. Potassium Ferricyanide

When these chemicals are mixed with water they form a photo-sensitive solution. This resultant solution is applied to a material such as paper to give it photo-sensitivity and therefore make it a suitable surface for printing on.

When exposed to ultra-violet light, a positive image is produced. The UV light caused a chemical reaction to occur between a ferrous complex and ferricyanide to make a viscous blue dye; known as Prussian Blue.

The image is developed when flushed with flowing water to remove the water soluble ferrous salts that hadn't reacted with light (where the light didn't reach the paper). An impression is left behind by the insoluble Prussian Blue.

The Double Exposure or Sandwich Print

There are two main darkroom methods used to create a double image effect.

The first includes simply exposing your film twice; resulting in two images recorded in one shot. Some manual winding cameras can be wound back to shoot again or can even be set to a double exposure after the first exposure has been made. More advanced automatic film cameras will have a multiple exposure setting.

When shooting double exposures it is important to consider compensating for the extra amount of light that reaches the film. This is to avoid over exposure which would occur with double the usual amount of light. A -1EV compensation is made if exposing twice or a -2EV if exposing four times.

The alternative method is making a sandwich print. The advantage id that any two negatives can be used but it is advised to ensure they have similar densities or tonal qualities. A disadvantage of the sandwich print is that only a double image can be created; whereas a camera can record multiple images.

Two negatives are aligned and exposed simultaneously to result in areas of both image being visible in the print. Due to the thickness of the double negative, a low f stop must be used for printing.

Photo editing software, such as Adobe Photoshop, can be used to make digital multiple images. A simple method is to layer the images you wish to use and reduce the opacity of them until you ate happy with the translucency of all of them.