

Common types of photographic processes

Daguerreotype

The Daguerreotype was invented by the Frenchman Louis Daguerre in 1839. Often thought of as the father of photography, Daguerre's patent was only enforced in England, as the French Government had bought the patent and allowed it to be used by the rest of the world. This process was soon overtaken by the Calotype (see below). To create a Daguerreotype, a silver plated sheet was given a light sensitive surface coating of iodine vapour. After the sheet was exposed in the camera, the image was developed over heated mercury and fixed in a solution of salt.

Calotype

William Henry Fox Talbot patented the Calotype (or Talbotype) process in 1841. As this process used a negative to produce multiple prints, it is seen as the forerunner to our modern printing methods. The negative was a sheet of light-sensitive paper and, because of this, Calotypes can often be identified by fibres from the paper showing on the print.

Albumen

The albumen print was invented in 1850 by Louis Désiré Blanquart-Evrard, and became the most common type of print up to the turn of the century. An albumen print was made by coating paper with a layer of egg white and salt to create a smooth surface. The egg white serves to bind the chemicals together. The paper was then coated with a layer of silver nitrate. The salt and silver nitrate combined to form light sensitive silver salts. This double coated paper could then be placed in contact with a negative and exposed to the sun to produce a print.

Collotype

The Collotype process was used between about 1870 and 1920. A glass plate was coated with sensitised gelatin and exposed under a negative. Light passed through the negative would harden the gelatin on the glass plate. The unexposed gelatin would absorb the water when washed and the exposed would repel it. The washed glass plate would be coated with ink, adhering to the exposed gelatin and printed onto fine paper. This process was ideally suited to the publishing of photographs in books as it produces a continuous tone for fine detail.

Gelatin Silver

Gelatin silver prints are the most usual means of making black and white prints from negatives. Paper is coated with a layer of gelatin which contains light sensitive silver salts. Gelatin silver prints gained popularity in the 1880s and eventually superseded the albumen print because of its stability. Gelatin silver prints remain the standard black and white print type.

Platinum

The process for making platinum prints was invented in 1873 by William Willis. The process depends on the light sensitivity of iron salts to create an image. No gelatin is used in this process, but rather a layer of platinum sits on the paper. Because of their permanence and tonal variations, platinum prints are used widely in fine art photography.