**Glossary of Photographic Terms**

**Albumen Print**  
Invented in 1850 by Louis-Désiré Blanquart-Evrard, the albumen print was the most popular print until the 1890’s and the advent of the silver gelatin print. In the nineteenth century, the albumen print process offered the opportunity for photographers to make multiple prints from a single negative, making one-of-a-kind processes like the daguerreotype and ambrotype obsolete. To make, a sheet of paper is floated on a solution of egg white and sodium chloride. After the paper dries, it is sensitized by floating on silver nitrate and dried in the dark. The paper is exposed in contact with a negative and then placed into the sun to print (see *printing out paper*).

**Ambrotype**  
The ambrotype process was patented, although not invented, in 1854 by James Ambrose Cutting, who popularized ambrotypes in the United States. Similar to the daguerreotype in size, appearance and mechanics, ambrotypes were also used primarily for portraits and were presented in hinged cases. Since they were faster, cheaper and simpler to produce, and the image was non-reflective and easier to view, the process quickly replaced the daguerreotype.

The ambrotype is a collodian-on-glass image that has been underexposed and then developed in iron sulfate and fixed in cyanide (see c*ollodian on glass negative*). When placed against a dark background, the result is a positive image with incredible detail.

**Bromoil Print**  
Developed in England in 1907, the bromoil process is known for its soft, painterly qualities. The bromoil process depends on the underlying principles of lithography, namely, that oil and water repel each other.The process uses a silver gelatin print that has been bleached in a chemical solution. As a result, the image disappears and the gelatin hardens in direct proportion to the amount of silver that comprised the image. The paper is then soaked in water in order for the gelatin to absorb water. Lithographic ink is then dabbed on the surface with a special brush or rolled on with a print tool called a brayer. Where the gelatin has absorbed water (in the highlights and to a lesser degree, the mid-tones), it repels the oil-based ink. In the other areas without water, the ink applies to the paper, thus creating the image.

**Calotype**   
In 1840 William Henry Fox discovered the calotype process for making paper negatives, which he used to make positive prints. Unlike the daguerreotype, the calotype involved a two-step process of negative to positive image making. Early negatives were made with uncoated paper, creating a somewhat diffused image. By the mid 1850’s, calotype negatives were replaced by collodion-on-glass negatives. The term calotype has sometimes been used to refer to the salted paper prints made from calotype negatives, as well as the negatives themselves.

**Collodion on Glass Negative**  
The process of making collodion on glass negatives, also known as wet-plate negatives, was announced by Frederick Scott Archer in 1851. It quickly eclipsed other negative processes until the 1880’s, when readymade dry plate gelatin on glass negatives became available. Generally used to make salt and albumen prints, the process provided enhanced detail and shorter exposure time.

To make a collodion negative, the syrupy collodion solution is evenly poured on a glass plate. Before the plate vaporizes, it is immerse in a solution of silver-nitrate, which makes it light sensitive. The plate is placed, still wet, in the camera and exposed to light. Then, it is immediately developed and fixed. A slow and inconsistent alternative to this process was the dry plate or preserved collodion negative, in which an additional coating is added to the sensitized plate to keep it moist, thus allowing the photographer to prepare it in advance.

**Contact Print**  
A contact print is made by putting light sensitive paper in direct contact with a negative and exposing it to light. The resulting image is the same size as the negative. Since the practice of enlarging a negative was not mastered until the 1880’s, most nineteenth century photographs were produced through contact printing.

**Cyanotype**  
In 1842 the astronomer Sir John Herschel, who had discovered the light sensitivity of iron salts in his scientific research, invented the cyanotype. To make one, paper is coated with iron salts and then dried in the dark, thus making it photo sensitive. An object, drawing, or a negative is placed in direct contact with the paper and then printed out in direct sunlight. The exposed paper reveals a mauve image until it is fixed in water. The oxidation of the chemicals creates a brilliant blue image.

**Daguerreotype**  
The daguerreotype was introduced in 1839 by Louis Jacques Mandé Daguerre and was the first photographic process to have widespread commercial success, only to be superseded two decade later by ambrotypes, tintypes, collodion on glass negatives and albumen prints. The daguerreotype is a unique photographic image on a sheet of copper coated with silver. The advantage of the daguerreotype over other processes was its stunning clarity. Because of its delicate nature, in the nineteenth century, it was usually preserved in a sealed leather case under a sheet of protective glass. To make a daguerreotype involves a series of complicated steps. The silver coated plate is carefully cleaned and polished and then fumed with iodine and bromine in a closed container to produce a light sensitive surface. The sensitized plate is exposed in a camera and then developed by the chemical action of mercury vapors on the exposed silver iodide surface to produce an image.

**Gum Bichromate Print**  
Introduced in 1894 and popular into the 1920’s, the gum bichromate process for making prints from negatives enabled photographers to create an image with a broad range of tones and diffused details, resembling a charcoal drawing or watercolor. A solution of gum arabic, pigment and potassium bichromate is brushed onto paper. After drying, the paper is exposed to light in contact with a negative. The gum bichromate hardens in direct proportion to the light exposure. Where the negative is dark, less light reaches the paper, and the gum does not harden. The soluble gum bichromate is washed away with water. The photographer can further manipulate the print by exposing the print a second and even third time after coating it with another layer of gum bichromate.

**Photogram**A photogram is a photographic image that is created without a camera and relies entirely on the action of light on light sensitive film or paper. An object is placed directly on the film or paper where the object blocks the light, the paper is not exposed and remains white. William Henry Fox Talbot’s first experiments with photography resulted in photogenic drawings, which later became known as photograms.

**Platinum Print/Palladium Print**In 1873 William Willis was able to produce a viable platinum paper which was available commercially by 1879. In platinum printing, paper sensitized with iron salts is exposed to light in contact with a negative until a faint image appears. This paper is developed with chemicals in a process that dissolved the iron salts and replaces them with platinum, thus further bringing out the image. The final print has tones and textures not attainable with gelatin silver prints, and the process produces the most stable metal based print. During World War I, as the cost of platinum rose, palladium, which was somewhat cheaper than platinum but depended on the same process, was introduced as a substitute. **Printing-Out Paper**  
Printing-out paper refers to silver-chloride paper that is used to produce a photographic print from the action of exposure to light on the paper in contact with a negative. The image appears during the process of exposure to the light, not in a developi ng tray with a chemical bath. The exposure process can be halted at any time, at which point the excess silver is removed in a water bath and the print is toned (optional), fixed and washed again.

**Silver Bromide Print**  
See *Silver Gelatin Print*

**Silver Gelatin Print**  
The first papers coated with an emulsion of gelatin silver halides were introduced in the 1870’s, following the introduction of gelatin on glass negatives. This innovation came into general use in the following decade and has remained the standard form of black and white photography because of its superior efficiency, consistency and stability than the preceding albumen process.

**Tintype**The tintype was invented by Hamilton Smith in 1856. The name tintype is misleading since the process depends on a thin sheet of japanned iron, not tin, as the substrate for the image. Like the ambrotype, the tintype is a collodion image that appears to be a positive against the dark support. It is underexposed and then developed in iron sulfate and fixed in cyandide. Tintypes were inexpensive to produce and were a very popular method of portraiture in the second half of the nineteenth century. In some countries, their use persisted well into the twentieth century.

**Van Dyke print**

Also known as a kalllitype, this process is the same as making a cyanotype. Unlike the cyanotype, the chemistry produces color tones from black to brown and sepia to purple.

**Wet Plate Photography** (see collodion on glass negative)

**Sources:**  
Baldwin, Gordon. *Looking At Photographs: A Guide to Technical Terms.* Malibu: The J. Paul Getty Museum, 1991.  
  
Rexer, Lyle. *Photography’s Antiquarian Avant-Garde: The New Wave in Old Processes.* New York: Harry N. Abrams, 2002.  
  
Wikipedia, The Free Encyclopedia  
http://en.wikipedia.org/