

# A Guide to the Photographs

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Edward Curtis is renowned as a maker of powerful, evocative images of Native Americans. He was also very gifted as a printmaker, possessing great technical ingenuity and virtuosity. Although his photogravures have been reproduced for book publication, very few people have ever seen his original master prints—the prints he made for exhibition or sale. His master prints comprise only about half a percent of his extant body of work, yet they are often extraordinary in their craftsmanship and beauty.

Curtis printed from his negatives using a wide variety of photographic print media. Prints done in several of these media are especially rare, while examples in other media are less rare. The vast majority of Curtis prints are photogravures, a photoengraving technique notable for its unusual subtlety. While photogravure gave Curtis a beautiful but expensive way to produce the quantity of prints he needed for *The North American Indian*, he also made prints in a number of other media. This was done for a variety of reasons—to get initial feedback on his negatives while still in the field, for reference and editing purposes, as experiments, and as finished prints that could be sold or exhibited.

The intent of this guide is to introduce the different print processes that may be encountered in vintage Curtis photographs and to describe their relative merits. For the purposes of this guide, the term vintage refers to prints made by Curtis or his studio prior to 1930, as well as to the first printing of the photogravures, which occurred between 1907 and 1930.

## Photogravure

Curtis's work is known almost exclusively through his photogravure prints, commonly referred to as "gravures." More than ninety-eight percent of vintage Curtis prints were made in this medium. These hand-pulled photoengravings were printed by master engravers and printers in Boston. Photogravure is a marriage of photography and engraving wherein the photographic image is chemically etched into the surface of a copper printing plate. To make a photogravure, an interpositive generated from the original negative is contact printed onto a photosensitized copperplate. After the exposed image, which again is in negative form, is developed out, the plate is placed in an acid etching bath. The acid eats microscopic pits in the copper, with the shadow areas of the finished image etched more deeply into the plate. After it is etched, the plate is cleaned, inked, and printed by hand, one at a time.

Curtis used the photogravure process almost exclusively for producing the images for his magnum opus, *The North American Indian*. The 2,200 images that Curtis selected for that project were each printed in an edition of approximately three hundred impressions. In spite of its expense and difficulty, Curtis chose photogravure because it was one of the finest photographic printing processes

available. The technique and artisanship had reached their zenith by the early 1900s, and large numbers of prints could be made with very consistent results, making photogravure the ideal medium for the project. It should be noted that, of all the images from *The North American Indian*, perhaps four to six hundred were also printed as master prints in other photographic media.

As the overwhelming majority of his oeuvre, vintage photogravures from *The North American Indian* are the most recognized form of Curtis's work. The beauty, warm sepia tones, and subtle soft resolution of the prints complement Curtis's imagery perfectly. In *The North American Indian*, a number of hand-colored photogravures supplemented the traditional sepia-toned gravures.

Curtis's photogravures were originally available only as part of the 2,200-print, twenty-volume, twenty portfolio sets of *The North American Indian*. During the past thirty years, gravures have often come onto the market individually from broken sets or as prints that were never integrated into sets. The *North American Indian* project itself still stands out as the most sumptuous and ambitious photographic undertaking in history, and the photogravures remain justifiably respected.

#### Master Prints

The term master print, as used here, simply refers to those nongravure prints made by Curtis, or his studio, for exhibition or sale. Although relatively few were made, these master prints were usually produced with fine, expensive, and often demanding materials. The best prints, created to exacting standards, often have great subtlety and delicacy. They are typically signed and/or blind-stamped (that is, debossed with the Curtis copyright information).

Because of the expense and effort required to make them, Curtis generally created master prints only of images he thought were his most evocative and compelling. The best examples are quite extraordinary. The variations in print quality found in the master prints is undoubtedly due to the fact that his studio produced many of them while Curtis was in the field. Curtis's master prints can be found in several different media, which are described here.

#### Albumen Print

Albumen prints may have been the earliest form of master print Curtis made, and today they are the most rare, with very few examples surviving. The images Curtis printed in this process during a two- to three-year period are dramatic and compelling, and they provide a powerful and unique example of Curtis's artistry and technical genius.

The lightweight paper used for albumen prints was coated with a light-sensitive mixture of whisked egg white (albumen), salt, and silver nitrate. The paper was contact-printed with a negative, usually in bright sunlight, then processed. While albumen was a popular process in the 1860s and 1870s, by the 1890s it had almost become obsolete since much simpler processes were readily available. Curtis, however, created a very small body of exquisite albumen prints around 1900, and a handful of these still exist. In general, albumen prints have a semi-glossy surface. Curtis's prints, in particular, have a distinctive rich, reddish-brown

tonality due to the specific toners he utilized.

### Platinum Prints

Platinum prints are widely regarded as the highest form of photographic printing, but because the medium is both expensive and difficult, the prints are inherently very rare. While relatively few photographers worked in platinum, Curtis did so frequently; and he left us with a wonderful body of platinum prints. However, of the several hundred images printed in platinum, it is unusual for there to be more than two or three prints of any one image.

Platinum prints are known for their rich blacks, subtle highlights, and broad, well-distinguished midtones. Because the platinum solution soaks into the paper, rather than being suspended above the surface, as in other media, the platinum image appears to be within the paper itself. Curtis's platinum prints are delicate, generally warm-toned, and often printed on high-quality, heavily textured watercolor paper.

The product of a contact-printing process, platinum prints, like albumen prints, exhibit very high resolution. Once the paper is sensitized with iron salts and silver nitrate mixed with the rare noble metal platinum, it is exposed in sunlight (or another strong source of ultraviolet light); the image appears during exposure.

The print is then immersed in a potassium oxalate solution to dissolve the iron salts. The platinum remains, forming the photographic image.

Platinum prints are exceptionally stable and while platinum itself does not oxidize, Curtis's platinum prints at times may evidence some oxidation from residues of iron or other metals used in processing or toning the print. With the possible exception of the albumen prints, platinum prints represent Curtis's highest form of expression. Although they are not nearly as rare as the albumen prints, platinum prints nevertheless comprise well under half a percent of extant Curtis prints.

### Goldtone Prints

The goldtone, which is also known as an orotone and a Curt-tone, was a hallmark of the Curtis studio. Even though Curtis pioneered and popularized this rarely used medium just after 1900, he only printed about one of every thousand negatives in this expensive and difficult process. It was clearly his favorite medium, however, and he wrote about it quite eloquently in his studio's Goldtone Promotional Brochure:

The ordinary photographic print, however good, lacks depth and transparency, or more strictly speaking, translucency. We all know how beautiful are the stones and pebbles in the limpid brook of the forest where the water absorbs the blue of the sky and the green of the foliage, yet when we take the same iridescent pebbles from the water and dry them they are dull and lifeless, so it is with the orthodox photographic print, but in the [goldtone] all the transparency is retained and they are as full of life and sparkle as an opal.

The goldtone process is relatively simple to describe—the photograph is printed

directly on glass instead of paper, then backed with a gold liquid wash or spray—but in practice it is very difficult to produce high-quality goldtone images. The fact that the emulsion is suspended on and supported by glass, rather than paper, creates a variety of limitations and difficulties. Nevertheless, Curtis was often able to achieve beautiful results, and his goldtones have become very valuable and highly sought after. The reflectivity of the gold backing, which is visible through the glass and the lighter areas of the emulsion, creates a luminosity and a feeling of three-dimensionality that makes photographs printed with this process both unique and very appealing.

With few exceptions, Curtis printed orotones in four sizes, ranging from 8" x 10" to 18" x 22", although those larger than 11" x 14" are extremely rare. Despite the small number of negatives he printed in this process, several of those images were quite popular, and a number of goldtones exist of images, including *The Rush Gatherer* (p. 133) and *Homeward* (p. 172). Vintage goldtones have survived the years remarkably well considering their fragility, although the gold backing is more prone to chemical deterioration than most traditional photographic processes and is exceedingly difficult to conserve or restore.

#### Toned Silver Prints

Curtis produced a small body of toned gelatin silver prints on papers that varied in texture, weight, and finish. In a gelatin silver print, the most common form of black-and-white photograph made in the past century, a silver salt suspended in a gelatin emulsion ultimately forms the photographic image. Like the platinum prints, Curtis toned most of his silver prints to give them the warm sepia tone that was so appropriate for his subject matter.

Silver prints that were processed to exhibition or sale quality constitute another form of master print. While exceptional toned gelatin silver prints can have a rich aesthetic quality, they are rarely as delicate, subtle, or rich as the finest platinum prints. Curtis's silver prints frequently have a warmer tone than his platinum prints. Unlike most photographers of his era, Curtis appears to have created a larger body of platinum prints than silver prints, by a significant factor. While his toned silver prints are generally less compelling than his platinum prints, they nevertheless form an important body of work.

#### Experimental Prints

Curtis avidly explored various aesthetic movements and experimented with a variety of photographic techniques. Building his own camera at age twelve was certainly an early indication of this bent. During his career, Curtis produced a small and unusual body of experimental work, a few examples of which still exist. In some of these images, he combined ink, oils, pastels, and/or gum bichromate to create prints with a much more personal, handmade feeling. Photographers in the Pictorialist movement highly valued both a hand-crafted appearance and the processes that produced it, and these experimental prints may well have been an expression of Curtis's early Pictorialist leanings. Some of these prints were beautifully printed and should be considered master prints.

#### Negatives and Proofs

Curtis created prints in a number of processes during the preliminary stages of

proofing his negatives and editing the images he would ultimately use in his North American Indian project. Historically, these preliminary prints were not thought to be of much value, and consequently few have survived. They rarely possess the refinement or sophistication found in Curtis's master prints, but some possess an unusual and appealing directness and intensity. Recently, collectors have become interested in these prints because of these qualities. In some cases, they may be the only evidence that remains of a particular negative, since approximately ninety-nine percent of the negatives, many of which were on glass, no longer exist. Some of these prints possess great aesthetic power, while others have important historical and/or didactic value. Some of them, for example, are unique records of certain aspects of Native American culture. It should be remembered, however, that they were originally printed for utilitarian purposes, not for exhibition or sale.

#### Field Prints

Curtis commonly made prints while still in the field to see what he had achieved, or failed to achieve, with his new negatives. Without easy access to a darkroom and the chemistry necessary for traditional photographic printing, Curtis chose a wonderfully simple process for his field prints called cyanotype. The cyanotype process was invented in 1842 by photographic pioneer Sir John Herschel; it is a precursor to the technique architects use for blueprints. Cyanotype is a printing-out process, which means that the image forms during exposure to light and does not require subsequent chemical development. Curtis, or more likely an assistant, would place the negative in direct contact with a piece of paper that had been coated with sensitized salts. The exposure, normally made in a glass-fronted box that held the negative in tight contact with the sensitized paper, was made in sunlight; the paper was then washed with water to fix the image. The chemical changes to the emulsion during exposure produced a rich blue tone (hence "cyanotype") that became deeper and darker the more it was exposed to light. Curtis's cyanotypes are now very rare since most have been discarded over the years. However, they form a powerful link to Curtis and his project and are often the only remaining evidence of a negative. While aesthetically something of an acquired taste, cyanotypes have a subtle, yet often powerful beauty that is becoming more and more appreciated.

#### Reference Prints and Proof Prints

After Curtis returned from the field, his studio staff would make gelatin silver reference prints from some of his new negatives. He used these prints as a simple record of the negatives or as an aid for further editing of the work. Because Curtis undoubtedly printed most of his negatives as cyanotypes so he could inspect them while he was in the field, many were not reprinted as silver prints when he returned to the studio. Those that were reprinted were likely images Curtis thought were possibilities for further consideration. He thus used the gelatin silver reference prints as a more refined and permanent evaluation and editing tool than the cyanotype proofs. The Curtis reference prints are typically printed on semigloss or glossy papers and are not, as a rule, toned, as are his master prints.

The prints referred to as proof prints are those that were produced as an intermediary step while creating a finished print. Within Curtis's body of work, proof prints are most commonly gelatin silver prints and may be either toned or untoned. They were printed to aid Curtis in exploring, evaluating, and determining what the final state of an ideal finished piece would be, such as the dimensions, contrast, tonality, and other aesthetic considerations. Curtis also made proof prints as gravures, and as toned and untoned platinum prints. There are some proofs done as collotypes, experimental tests as an alternative to photogravure.

Neither reference nor proof prints possess the subtlety or richness of a highly realized master print. However, like exceptional cyanotypes, some possess an unusual directness and intensity, and some may further provide us with evidence of an image that would otherwise be unknown. Lastly, they can provide us with clues to Curtis's aesthetic or to the processes he employed.