

The Platinum / Palladium Process

This is an alternative photographic process, pursued by such artists / photographers as Alfred Stieglitz and Edward Weston during the early 20th Century. More recently, both Robert Mapplethorpe and Irving Penn - among others - have also worked with this process.

While considered the apex of the many alternative processes, the « Platinotype » is a photographic printing process patented by William Willis in 1873. This was preceded by a succession of experiments by various photographers and scientists, commencing around 1830. During World War I, platinum prices soared due to their function as a catalyst in explosives. As a result, photographers needed to investigate other photographic processes - gelatin silver among them. Soon, ready-coated platinum papers disappeared from the marketplace. When rediscovered around the 1960's, « Platinotype » was once again embraced because of the immense tonal range this technique allowed each photograph. A primary advantage of this technique is the impregnation of finely divided platinum / palladium salts into the paper's fibers - allowing the image to be as long-sustaining as the fine paper the image is printed on. The platinum / palladium process is an extremely slow print-by-contact method requiring very strong UV light, and requiring that the negative be the same size as the desired print.

Artist's paper is sensitized by brush-coating a mixed solution of ferric salts (UV light sensitive) and chloroplatinite and / or chloropalladite salts. Once dry, the paper is exposed to UV light in tight contact with the negative. Processed after development in a solution of potassium oxalate, ammonium citrate or other developers suitable for the Pt/Pd print, the photograph is composed of platinum (and or palladium), lending the image a subtle tonality that can vary from cold metallic to warm red tone, depending on the noble metals used in the mixture preparation.

- J. Miguel Ferreira