

# Photogram 101

## What's a Photogram?

A photogram is a photographic image produced without a camera. Photograms are created by placing an object on a sheet of photographic paper in a dark room, exposing it to light, and then developing the paper with a chemical wash. The result of this process is a high contrast image that depicts the silhouette of the objects placed on the photographic paper.

## History - Art & Science

The science behind photograms dates all the way back to antiquity when Aristotle, philosopher and scientist, observed that sunlight affects the color of one's skin (suntan, sunburn, etc.) It wasn't until the Middle Ages that the study of the chemical components of pigmentation was undertaken. The Renaissance took this study one step further by determining particular chemicals involved in the sun's effect on color, such as the formation of silver chloride using silver nitrate and chlorine.

In the modern era, chemists took these stepping stones from antiquity to create chemical mixtures that, when applied to paper and put in contact with light, resulted in pigment changes. Chemists experimented by placing objects on top of this paper and exposing them to light, thus creating photograms. They were, however, impermanent and would disappear after a few hours.

William Henry Fox Talbot, the man credited for discovering photography, developed a way to preserve these photographic prints.



Anna Atkins, *Papaver rhoeas*, Paper water-marked, 1845. Cyanotype



Leigh Anne Langwell, *Shadow #064*, 2005-09, Photogram on gelatin silver paper



John Dillwyn Llewelyn, *Ferns*, 1850s

Talbot bathed the paper using a weak solution of common table salt and, after the paper had dried, washed it again with a strong solution of silver nitrate. These two chemicals formed silver chloride.

To create a test photogram, Talbot pressed a leaf onto the paper, placed glass on top, and exposed it to light. The light darkened the object's surroundings and the object was seen in silhouette. This was the first photogram as we know it today.

In the early 20th century artists explored this "cameraless" form of photography and it has since been revived in contemporary art.

# Make Your Own Photogram

Photograms are exciting to make and, in theory, quite simple. The only difficulty is in the chemical treatment of the paper. Photograms are still fun and can be created without this tricky chemical component. Instead, you can develop your own photogram using a scanner. Read on to find out how!

## Materials:

- miscellaneous objects
- sunlight
- any size black and white photo paper
- a dark room
- a light proof box (photo paper box works)
- flatbed scanner

## Step 1



Organize your found objects on a piece of paper to plan what your finished photo will look like.

## Step 2



Find the darkest room in your house (preferably without windows.) Bring your photo paper, objects, and light-proof box into the room.

## Step 3

Turn off the lights. Open your box of photo paper. Take out one sheet and put it inside the light proof box. Place your objects on the page in the arrangement you planned. Once finished, close the light-proof box.

## Step 4

Take your lightproof box (which holds your photo paper and arrangement of objects) outside. Open it. A piece of glass can also be placed on top of your objects to flatten them.

## Step 5



Wait for your image to expose. In direct sunlight this will take approximately 30 minutes. After this time, close the lid of the box to stop exposure.

## Step 6



Instead of doing a chemical wash to preserve the image, scanning it in to a computer is an easier and faster alternative. Take the photographic paper as soon as it has finished exposing to the sun and scan it into your computer using a flatbed scanner.

Interested? Find out more at:  
<http://www.photogram.org/concept/index.htm>