CYANOTYPE





The cyanotype process John Herschel, a scientist, in 1842 as a means to reproduce diagrams. , was first introduced by John Herschel (1792 – 1871) in 1842. Sir John was an astronomer, trying to find a way of copying his notes. Cyanotype is a photographic printing process that produces a cyan-blue print. The process uses two chemicals: ferric ammonium citrate and potassium ferricyanide

Sir John Herschel, April 1867 Julia Margaret Cameron Engineers used the process well into the 20th century as a simple and lowcost process to produce copies of drawings, referred to as <u>blueprints</u>. A blueprint is a reproduction of a technical drawing using a contact print process on light-sensitive sheets. Introduced by Sir John Herschel in 1842, the process allowed rapid, and accurate, production of an unlimited number of copies.

LTAR

net getar

Blueprints

S

E

MARALE FLOOR OF SANCTUARY

CHURCH OF OUR LADY OF LOURDES EN WAJ BEER RECTOR ONAMA NESS JX MACHTIGALS ACCUITECT ONAMA NESS

ALTA

ANNA ATKINS

One of the first people to put the cyanotype process to use was **Anna Atkins** (1799-1871), who in October 1843 became the first person to produce and photographically illustrated a book using cyanotypes. The cyanotype to the right is from a book of ferns published in 1843 by Atkins. She was a pioneering figure in photographic history, having **produced the first book to use photographic illustrations**. She was a botanist and her father a friend of Fox Talbot. Atkins book uses 424 cyanotypes (or as they were known then: "shadowgraphs"). The book was called "British Algae: Cyanotype impressions". It was printed privately and issued in several parts over ten years.

Her book therefore precedes Fox Talbot's own "Pencil of Nature" in 1844. Anna's innovative use of new photographic technologies merged art and science. Not only did Anna's cyanotype impressions provide enough detail to distinguish one species from the next, they were also imaginative compositions.

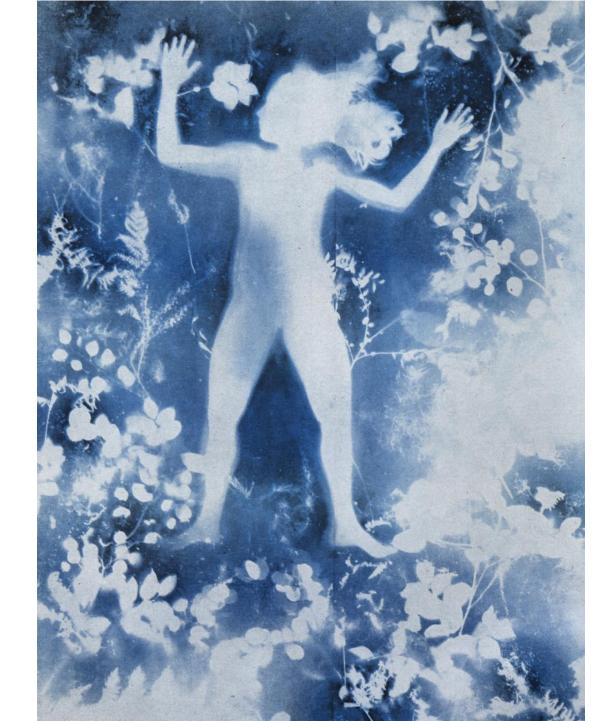




Susan Weil and Robert Rauschenberg

"blueprints"





Untitled (1951), by Susan Weil and Robert Rauschenberg, monoprint: exposed blueprint paper, 72 x 48 inches. © Robert Rauschenberg Foundation and Susan Weil.

Female Figure (ca. 1950), by Susan Weil and Robert Rauschenberg, monoprint: exposed blueprint paper, 105 x 36 inches. © Robert Rauschenberg Foundation and Susan Weil.



ROSIE EMERSON

Rosie Emerson is an award winning contemporary artist working almost exclusively on representing the female form

Her Cyanotype works enable her to montage objects with real size photographic negatives. Using UV light from the sun to expose objects and images directly on to the sensitized surface, the works are often hand painted or gilded with gold leaf. Emerson describes 'the technique itself has an element of magic about it, it's also a wonderful discovery to be able to combine painting, collage and photography in this way''.

> LIBERTY 75 CM ROUND, HAND PAINTED CYANOTYPE WITH 22 crt GOLD LEAF ON PAPER FRAMED IN BESPOKE FRAME WITH CONVEX DOME





VEGA 180 X 65 CM, CYANOTYPE ON PAPER IN COLLABORATION WITH BECKY PALMER

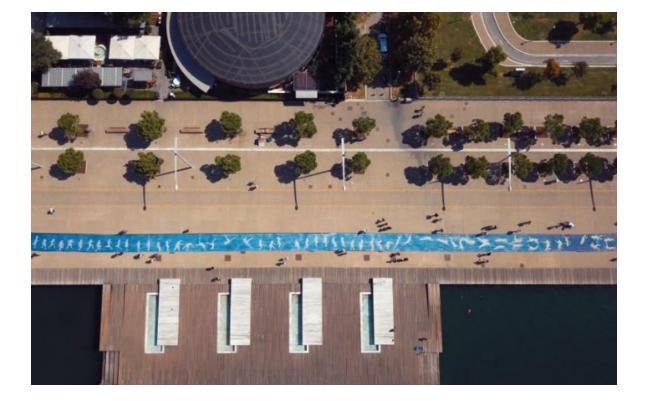


LYRA 37 X 22 CM, HANDPAINTED CYANOTYPE ON PAPER



Largest cyanotype

The **largest cyanotype** photograph is 276.64 m² (2977.72 ft²), created by **Stefanos Tsakiris** (Greece) in Thessaloniki, Greece, on 18 September 2017







cyanotypes were actually called photograms or shadowgrams, and that's a good explanation of what they were. Placing objects on the surface of the coated paper and exposing them creates an image in the same shape as the object – a shadow.

Photogram

Placing objects on the surface of the coated paper and exposing them creates an image in the same shape as the object – a shadow.

You can also draw on transparencies or glass, make stencils, or place other semitransparent materials in front of your canvas.



Contact Printing

You make contact prints by placing enlarged negatives on your material, which creates a positive the same size as the negative.





The kit includes: Part A - Potassium Ferricyanide 0.8 oz/23.2 g Part B - Ferric Ammonium Citrate 1.9 oz/54.4 g

Jacquard's Cyanotype Set makes DIY cyanotype printing as easy as can be. The chemistry comes premeasured in lightproof black bottles. Simply fill each bottle with water to create Stock Solutions A & B and mix the two in equal parts to create the cyanotype sensitiser. Coat fabric or paper with the sensitiser and, once dry, create prints by exposing to sunlight or UV (3-15 minutes, depending on conditions), using objects or a film negative to create an image. After exposure, prints are processed in a tray of cool water and allowed to air dry over about 24 hours; prints will oxidise to their final deep blue colour.

PROCESS

Cyanotype is the "original" sun-printing process, one of the earliest photographic techniques. Unlike photographs set in silver, like in black and white photography, cyanotypes are using a solution of iron compounds.

The photograph can be taken with a camera, like a digital camera, and the resulting photo turned into a negative that can be used to make a cyanotype.

The basic cyanotype recipe has not changed very much since Sir John Herschel introduced it in 1842.

1) Potassium ferricyanide and (2) Ferric ammonium citrate (green). Too much potassium ferricyanide in the solution will lower printing speed; too little may cause the blue color to bleed into the lighter a reas. Basically equal volumes of the two solutions are used.

PROCEDURE FOR PRINTING

Work Area

A fully prepared work area should be organized before the sensitizing procedure begins. A light-safe area is best for sensitizing the fabric, paper, etc. For drying, establish a drying area in a totally dark room. **Method**

Mix Stock Solutions

Combine equal amounts of solutions A and B from one of the above recipes.

Sensitize surface

Soak paper or fabric in a tray of combined solutions or apply with a brush. Be sure to make some test strips for later use in testing exposure times.

Dry coated material

Dry a way from light. A clothesline can be hung over an old tub or layers of newspapers to catch drips. A hair drier or fan can be employed to shorten drying time. Dry coating should be bright yellow.

Printing

Cyanotype is a negative process - a reas where light does not hit sensitized material will remain white. Contact print by placing negative on your sensitized material. Expose to strong sunlight or UV light until the high values are a little too dark and the shadows have begun to reverse. You can use test strips to test light to determine best exposure time.

Washing and Developing

Wash in running water until yellow residue is gone from nonexposed areas. The print will still be a weak, silvery blue. As it dries it will oxidize and turn blue.

Intensification (Optional)

To brighten highlights and more fully develop the blue i mage, bathe the cyanotype print with a weak solution of household bleach and water (1/32) or 3% hydrogen peroxide. After a bout a minute in the intensifier bath, remove print and wash in plain water again for 20 to 30 minutes.

Drying

 $\label{eq:constraint} {\sf Dry\,finished\,print.\,Image\,will\,ge\,nerally\,a\,ppear\,darker\,when\,it\,is\,dry.}$



Please Wear:

- Goggles
- Gloves
- Apron

UV LAMP: * Wear UV protection glasses

