

A Lesson in Printmaking

The The Historic Woodstock Art Colony: Art in the Arthur A. Anderson Collection at the New York State Museum

For Grades 9–12



The New York State Museum is a program of | The University of the State of New York | The State Education Department | Office of Cultural Education

Introduction

Multi-talented artist (and expert mountaineer) Bolton Brown was one of the co-founders of the Byrdcliffe Arts Colony, but he left it in 1904 after clashing with fellow founder Ralph Radcliffe Whitehead. Thereafter, Brown split his time between New York City and Woodstock, teaching his own classes there in the summer.

By 1915 Brown was immersed in lithography, a printmaking process that uses a stone or metal plate and oil, water, and ink. Although the process was invented at the end of the eighteenth century in Germany and was used commercially and artistically throughout Europe and the United States in the nineteenth century, Brown is credited as the father of American lithography for his dedication to perfecting the medium scientifically and artistically. He experimented with and invented new processes, wrote widely on the subject, created more than 400 of his own original lithographs, and printed for other artists, such as George Bellows and Rockwell Kent. Brown's own work ranges in style and subject matter, exploiting the expressive possibilities of the lithographic method—from delicate, tonal landscapes to sharply delineated still lifes.

As an artist, Brown appreciated the physical labor that went into lithography. The process requires physical strength as well as a good understanding of chemistry, and Brown was often seen around Woodstock carting heavy limestone slabs from which he made his printing plates. He believed it was important to work directly on stone, saying that it was “the most perfect of surfaces,” and he would sometimes bring a stone out to a site and work directly from nature.



Bolton Brown

Choke Cherries, 1920

Lithograph

9 x 12¾ in.

About the Lithography Process

Lithography was invented in Germany in 1796 by the actor and playwright Alois Senefelder (1771–1834). Senefelder discovered the printing technique by accident while making copies of his scripts. He developed and advanced the process, and in 1818 he wrote *A Complete Course of Lithography*.

Lithography influenced the circulation and accessibility of texts and artwork because a writer or artist could make many copies of their work using a single stone. Lithography became popular for commercial use by around 1820. By the 1880s, adding color to lithographs was more commercially viable, and the process was widely used to create illustrations and advertisements. Many artists came to appreciate the shifts of tone that could be achieved with lithography.

Limestone is the most common stone choice for lithography because it is very porous and therefore holds the various media, although the minerals zinc and aluminum are also sometimes used.

Lithography uses a chemical process to create an image. The process is based on water and oil repelling each other, a phenomenon called *immiscibility*.

Warm-Up Questions

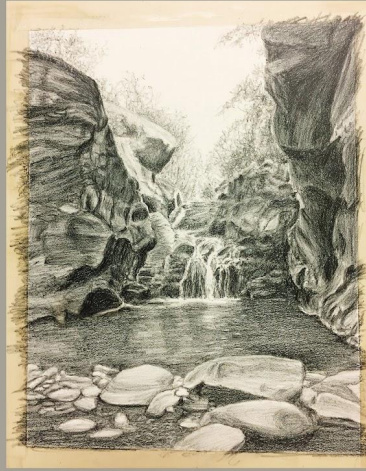
- ▶ How does the process of lithography affect and influence an artwork?
- ▶ What are the benefits and disadvantages of lithography as a medium?



The Lithography Process



1. The artist draws an image—in this case a landscape with a waterfall—with a lithographic pencil on a flat-surfaced stone.



2. The drawing on the stone is completed.



3. The printer coats the surface of the stone and drawing with gum arabic and nitric acid, a process that treats the non-drawn areas of the stone so that it will attract water and repel ink.



4. After the gum arabic dries, the printer washes out the crayon with a solvent.

The Lithography Process



5. The printer has applied asphaltum to the surface of the stone, which creates a base for printing, and then sponges the surface with water. The asphaltum base attracts the ink for printing.



6. The printer uses a leather roller to “roll up” the stone with lithographic ink. The surface of the stone must be continuously sponged with water to keep the non-drawn areas free of ink.



7. A sheet of fine cotton rag paper is placed on the stone and run through the press.



8. The inked image is transferred to the paper.

Guided Practice

Guided Practice



Bolton Brown

Little A, 1915

Lithograph in sanguine ink
12½ x 12¾ in.



Bolton Brown

Storm, 1923

Lithograph
13 x 11 in.

Encourage students to ask themselves:

- ▶ Do the lithographs fall within an established genre? (landscape, portrait, abstraction)
- ▶ How does the use of line create texture in each?
- ▶ How does the contrast of light and dark impact the tone of the artworks?
- ▶ How do you think the artist's creative process was different when creating drawings on lithography stones as opposed to creating a sketch on paper?
- ▶ How might the images have differed if the artist worked using a different printmaking method?

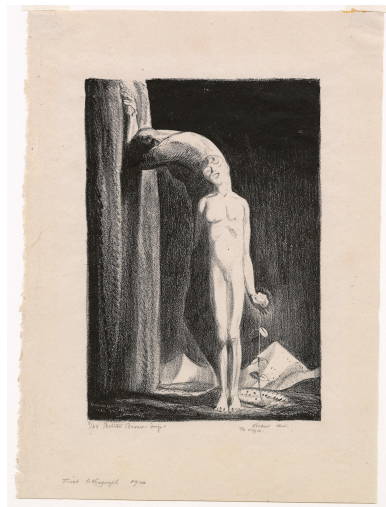
Expanded Discussion

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Bolton Brown created many hundreds of lithographs during his career, while also printing for artists like George Bellows and Rockwell Kent, who relied upon his skilled assistance with the complex techniques of lithography. In both Kent's and Bellows' pieces, Brown signed his name alongside the artist.

Encourage students to ask themselves:

- Should the printer sign the artwork? Why or why not?
- How do these works differ from Brown's direct work on stone in his own original artwork?



Rockwell Kent
Father and Son, 1920
Lithograph
6¼ x 4¼ in.



George Bellows
Appeal to the People, 1923
Lithograph
15 x 19 in.

Artmaking Activities

Artmaking Activity Ideas

Artmaking activities will be based on availability of materials in your classroom. These activities can present an opportunity to discuss with students the similarities and differences between printmaking processes.

The following are some ideas to get started with the process of lithography or other printmaking methods:

Lithography

If you have the proper materials, have students experiment with lithographic techniques and processes to produce their own prints. Have students focus on creating a range of tone using a variety of lines.

“Kitchen Lithography”

Stone lithography is just one printmaking technique. If you don’t have access to lithography stones and chemicals, “kitchen lithography” is an alternative, using ink, lithographic crayons, plexiglass, and commonly found household supplies, such as vegetable oil, vinegar, soda water, aluminum foil, sandpaper, sponges, and masking tape. Many explanations and demonstrations can be found online, from which teachers can learn the process to demonstrate for students, or to present the students demonstration footage in class.

Relief Printing

Relief printing is one of the oldest and most common forms of printmaking, dating back to ancient China. It involves the basic transfer of an image to a surface. The artist carves away an image on a block that is then inked and pressed onto a surface, transferring the inked form. This method can be used with linocuts, woodcuts and stamps, and even cut vegetables, like potatoes and celery bunches. Many demonstrations are available online.



Wrap-up

Have the students reflect on their own printmaking process and again pose the question:

- How might the process of lithography, or printmaking generally, add to the meaning of the artwork?

Vocabulary

lithography – From the Greek *lithos* (stone) and *graphein* (to write), the process of printing from a flat surface on which the image to be printed is ink-receptive and the blank areas are ink-repellent.

lithographic stone – A flat limestone block ranging in size and thickness. Stones can be reused by grinding down the surface to remove the previous image.

lithographic crayon – A compressed grease crayon or pencil used for drawing on stone or metal.

edition – The number of prints pulled from one stone is called an edition. Once a certain number of prints is pulled, the surface image is ground away to create a clean slate so that more prints of the image can't be made.

gum arabic – A natural substance that attracts water to and repels ink from the non-drawn areas of the stone.

asphaltum – A natural tar-like substance that forms a printing base that attracts ink.

printing press – A machine used to print text or images from a stone or plate. The press applies pressure to an inked surface.

chiaroscuro – The treatment of light and shade in drawing or painting.