# M.C. ESCHER 

Reality and Illusion

M.C. Escher, Waterfall, 1961, lithograph. © 2017 The M.C. Escher Company, The Netherlands. All rights reserved. www.mcescher.com. From the collection of Herakleidon Museum, Athens, Greece, www.herakleidon-art.gr

## Introduction

Share iconic and mind-bending artworks with your students this spring with a visit to the M.C. Escher: Reality and Illusion galleries and also explore Escher's legacy and influence on a contemporary artist in Illustrating Illusions: Drawings by Robin Lauersdorf, both exhibitions remain on view at the Woodson Art Museum through May 28.


Robin Lauersdorf, Waiting for My Ship to Come In, 2016, graphite and charcoal


Andrea Rich, Octopus, 1991, woodcut on paper

A selection of Birds in Art Master Artist Andrea Rich's woodcuts - printed only with black ink and utilizing only one woodblock - complements M.C. Escher's black-and-white prints and remains on view near the main entrance through July 20.

## About the Exhibitions

## M.C. Escher: Reality and Illusion

M.C. Escher: Reality and Illusion is a "retrospective" exhibition, meaning the galleries include artworks representing Maurits Cornelis Escher’s five-decade career. This exhibition of 120 woodcuts, lithographs, mezzotints, and drawings delves deeper into both the literal and impossible worlds Escher created and includes his most celebrated artworks. Drawn from the second largest private collection of M.C. Escher's work, Reality and Illusion includes early drawings, lesser-known book illustrations, detailed Italian landscapes, the tessellations for which he became famous, and examples of his signature architectural fantasies in which stairways seem to go both up and down. This exhibition is from the collection of Herakleidon Museum, Athens, Greece, www.herakleidon-art.gr

Learn more about the exhibition and this M.C. Escher collection using the Woodson Art Museum's free audio tour app, which can be downloaded on smartphones and tablets. The exhibition app features insights from Paul Firios, Escher collector and co-founder of Herakleidon Museum, and stories from artist Robin Lauersdorf on his Illustrating Illusions artwork.

## Illustrating Illusions: Drawings by Robin Lauersdorf

Wisconsin artist Robin Lauersdorf's complex drawings demonstrate that the pencil can do much more than serve as a sketching tool. For Robin Lauersdorf, graphite pencils are his medium of choice.

Robin Lauersdorf's finesse with a pencil and ability to capture and translate the nuances of the world around
him distinguish his drawings, imbuing them with an almost photographic quality. To obtain such extraordinary detail, he often spends months on a single drawing.

Lauersdorf's work is notable not only for the level of detail he achieves, but also for its juxtaposition of reality and imagination. Since childhood, he has been captivated by M.C. Escher's illusions - how black-and-white objects and images in Escher's artworks seem to morph and appear multidimensional.


Robin Lauersdorf, Lego My Treasure, 2013, graphite
Illustrating Illusions presents sixteen Robin Lauersdorf drawings, spanning a nineteen-year period and selected to illuminate Escher's influence. In these drawings, Lauersdorf creates impossible illusions, playfully challenging viewers to think about what they see and re-think expectations about drawings.

Illustrating Illusions: Drawings by Robin Lauersdorf was organized by the Leigh Yawkey Woodson Art Museum.

Join guest artist Robin Lauersdorf on Saturday, March 23, and Sunday, March 24, for a two-day drawing workshop for teens and adults; call the Museum to register at 715-845-7010.

## Artist M.C. Escher

(from the Herakleidon Museum's "Art \& Mathematics" education guide and exhibition materials)
Dutch graphic artist M. C. Escher was born to Sarah Gleichman and George Arnold Escher in Leeuwarden, Holland, in 1898 and raised in Arnhem. The youngest of five brothers, Escher showed an early love of the arts, creating his first linocuts (designs cut into blocks of linoleum) and prints from these at the age of 18.

In 1919, as a student at the School of Architecture and Design in Haarlem, he showed his designs to graphic arts teacher S.J.de Mesquita, who urged him to devote himself to the graphic arts. That same year, Escher created his first woodcut print and in 1922 provided woodcuts as illustrations for a friend's book.

Escher travelled throughout southern Europe from the early 1920s until 1936. During this time, he not only produced a number of noted landscapes, but also met and married Jetta, with whom he lived in Rome for eleven years.

Two visits to Spain, in 1922 and 1936, and the study of the Arabian decorative motifs at the Alhambra palace in particular, gave birth to Escher's passion for symmetry and the regular division of the plane. He was captivated by the floor and wall patterns of the Moors; however, he felt it a pity that all were abstract geometrical designs, as human and animal forms were very important to him. From that point, Escher strove to create the same endless, interlocking patterns, but with recognizable animal and human forms.


Above: Roofs and towers of Alhambra, Granada, Spain; left: Arabian decorative motifs of Alhambra

In 1935, the Eschers left Italy with their three sons and lived for a short time in Switzerland, before moving to Belgium in 1937. It was not until 1941 that they would return to Holland to settle in Baarn. Escher's departure from Italy was a turning point in his art. From then on, he would rarely be inspired by his surroundings, but rather by the many ideas he was trying to work out in his mind: duality, mirror images, multiple dimensions, infinity, and impossible constructions. Some of Escher's earlier work had hinted at these ideas, but now he would become absorbed by them. Escher said that his earlier work had only been "finger exercises."

Escher's most iconic artwork was created after 1937, when he walked through what he called "the open door of mathematics."

Through his prints, Escher made tessellations famous. A tessellation can be defined as repeated shapes over a surface without any gaps or overlaps, which form a pattern. Everyday examples include soccer balls, the houndstooth fabric design, or a bee's honeycomb.
M.C. Escher ca. 1935

M.C. Escher, Day and Night, 1938, woodcut. © 2017 The M.C. Escher Company, The Netherlands. All rights reserved. www.mcescher.com

In the 1960s Escher's prints began to gain popularity in Europe and the United States. His work was internationally admired and often copied while he was still alive. Escher spent the last thirty-two years of his life in Holland, completing his final print, the woodcut Snakes, three years before his death, at the age of 74.


Escher was a prolific artist and passionate about every aspect of his craft. His art continues to fascinate scientists, mathematicians, artists, philosophers, and museum goers around the world. His prints can be found in private collections and museums, such as the National Gallery of Art in Washington D.C.
M.C. Escher at work on his woodcut Snakes, ca. 1969

In addition to his impossible architectural structures, sweeping landscapes, and illustrations of mathematical principles, Escher also is responsible for creating some of the twentieth-century's most famous portraits including the portrait of himself and his wife Jetta, entitled Bond of Union, and his lithograph Three Spheres II.

M.C. Escher, Bond of Union, 1956, lithograph. © 2017 The M.C. Escher Company, The Netherlands. All rights reserved. www.mcescher.com

M.C. Escher, Three Spheres II, 1946, lithograph. © 2017 The M.C. Escher Company, The Netherlands. All rights reserved. www.mcescher.com

M.C. Escher, Theosophy, 1921, woodcut. © 2017 The M.C. Escher Company, The Netherlands. All rights reserved.


Escher rolling out ink for a woodblock www.mcescher.com

Throughout his career, Escher experimented with woodcuts, wood engravings, lithographs and mezzotints. In 1946, he first tried his hand at mezzotints and made eight by 1951, when he decided that this process was, as he said, "too great a test of his patience." Despite his proficiency with many art forms, Escher favored woodcuts. No matter what technique he was using, Escher preferred to print on Japanese paper, which he would buy in bulk whenever he found it.

## Printmaking Techniques

Three types of original prints are featured in the Escher exhibition: woodcut/wood engraving, lithograph, and mezzotint. Each of these printmaking processes presents distinct aesthetic qualities and challenges for artists.

## Woodcut \& Wood Engraving

Known in China from the eighth century, the technique of stamping from woodblocks was used to print textiles before it was applied to paper. The difference between a woodcut and a wood engraving is that for the woodcut the artist uses the side grain, while for the wood engraving he or she uses the end grain. The same three steps are required for both:

1. The artist draws the image on the piece of wood and carves away the areas that must remain white.
2. With a roller, ink is applied on the surface of the wood.
3. A printing press or a hard smooth tool is used to press the paper on the woodblock to transfer the image.

As with all prints, the image cut or carved in the wood is the reverse of the final print.

## Lithograph

The term lithography comes from the Greek "lithos" (stone) and "graphy" (writing). The lithography technique is based on the physical property that oil and water do not mix. Because of the equipment used and the knowledge and skill required for the printing process, lithography lends itself to collaboration between an artist and a printer. When the printing is done by the artist himself, it is so noted, in pencil in the lower margin. Five steps are required to produce a lithograph:

1. A special Bavarian limestone is polished so that its surface is uniform and free of grease and oils. Bavarian limestone absorbs water and remains wet.
2. The artist draws directly on the stone using special oil-based lithographic pencils.
3. Water is then applied on the surface, which is repelled by the greased image but absorbed elsewhere.
4. With a roller, oil-based ink is applied on the entire surface of the stone. It is repelled in the wet areas, but clings to the pencil drawings.
5. A printing press is used to transfer the image to the paper.

## Mezzotint

The term "mezzotint" comes from the Italian "mezzo" (half) and "tinta" (tone), and so means halftones. It is not lines, but shaded and light areas that form the image. This is done by trapping ink between roughened grooves on a metal plate. Four steps are required to produce a mezzotint:

1. A copper or steel plate is prepared by roughing it with a "rocker" (a curved, notched blade) so that the surface is entirely filled with thousands of crossing lines of rough dots. At this stage, an inked plate would print a rich, uniform black.
2. A special tool is used to press down the areas that must be lighter, reducing the amount of ink that will be absorbed in step 3.
3. The ink is applied uniformly with a roller over the plate, pressed areas retaining less ink. A completely smooth area holds no ink and so produces white.
4. A printing press is used to press the paper on the inked copper plate to produce the image. No more than 50 really good prints can be produced from one plate.

## Before Your Visit



Observe and Discuss: Compare M.C. Escher's Drawing Hands and Robin Lauersdorf's Helping Hands. Invite students to consider how Lauersdorf made the Escher's concept of Drawing Hands his own and which image they prefer citing details in the artworks to support their claims.
M.C. Escher, Drawing Hands, 1948, lithograph. © 2017 The M.C. Escher Company, The Netherlands. All rights reserved. www.mcescher.com


Robin Lauersdorf, Helping Hand, 2011, graphite


## Paper Play

Make a Möbius: A Möbius strip is an object that cannot be oriented; it has no start, stop, front, or back position . . . just one, continuous side as illustrated in the image to the left. M.C. Escher's fascination with impossible objects and infinite structures, led him to depict Möbius strips in his artworks, most famously featuring red ants marching along the endless loop of a Möbius strip.

To create a Möbius strip, cut a strip of paper, turn one end over, and tape the ends together (see images below).


Escher-Inspired Pop-Up Stairway: Using the pattern template on the following page, instruct students to make cuts along the black solid lines, fold in along the red-dashed lines and fold out along the blue-dashed lines to create an Escher-inspired staircase out of paper like the sample pictured below.



Review the four types of printmaking using these online resources:
The Museum of Modern Art's interactive "What is a Print?" site:
http://www.moma.org/interactives/projects/2001/whatisaprint/print.html
The Minneapolis Institute of Arts YouTube channel printing process videos:
Relief (https://www.youtube.com/watch?v=O0skLwaFpn0)
Intaglio (https://www.youtube.com/watch?v=SNKn4PORGBI)
Lithography (https://www.youtube.com/watch?v=JHw5_1Hopsc\&list=PL60EF8C723EACBBB7)

## Screenprinting

(https://www.youtube.com/watch?v=wogKeYH2wEE\&list=PL60EF8C723EACBBB7\&index=4)

## Create a Relief Printing Studio:

Relief Printing Supplies: Rubber stamps can be used to convey relief-printing basics or students can create their own relief-printing plate using Styrofoam trays or thin foam. Students can draw an image or design with a toothpick or dull pencil on the foam (image below shows wooden stylists and a 4 "x 6 " foam plate).


Rolling the Ink and Inking the Plate: Ink "the plate" using a soft, rubber roller (called a "brayer" in printmaking) to apply a thin, even layer of ink on to a smooth surface (the picture below shows ink rolled out onto a sheet of Plexiglas ©) for printing. Place a piece of paper on top of the plate and use a wooden spoon (printmakers would use a wide, flat disc, called a baron, featured in the image below) to press the paper onto the plate, transferring the ink and image onto the paper.


Reveal the Print and Create an Edition: Remove the paper from the plate to reveal the original print.
Students can create multiple prints from the same plate to create an "edition" or series of prints, each one considered an original work of art. Students should mark their series of prints in the lower left corner below each image with a signature and two numbers and a slash. For example, the first print they create in an edition of five prints would show " $1 / 5$," which identifies the print as $\# 1$ of 5 .


During their docent-led Experience at the Art Museum, students will explore M.C. Escher: Reality and Illusion and Illustrating Illusions: Drawings by Robin Lauersdorf, discuss artworks in the galleries, and have an opportunity for hands-on art making inspired by time in the galleries. Students will create their own tessellation with a small square piece of paper, tape, a pencil, and a sheet of $11 " \times 17 "$ paper to build their tessellation pattern (see samples below).


## Activity Guides

Each participant on a docent-led Experience receives an Activity Guide to extend learning and enrichment beyond the Woodson Art Museum and as a way to share the visit with friends and family.

## Woodson Art Museum Information

Please encourage your students to visit the Museum again.

## Hours:

Tuesday - Friday
First Thursday of every month
Saturday - Sunday
$9 \mathrm{am}-4 \mathrm{pm}$
$9 \mathrm{am}-7: 30 \mathrm{pm}$
Noon -5 pm

Closed Easter Sunday.

## Contact:

Call the Woodson Art Museum or visit the website for more information:


700 N. 12th St.
Wausau, WI 54403
lywam.org
715.845.7010

