

SCHOLASTIC

ART

SEPT/OCT 1998

VOL. 29, No. 1

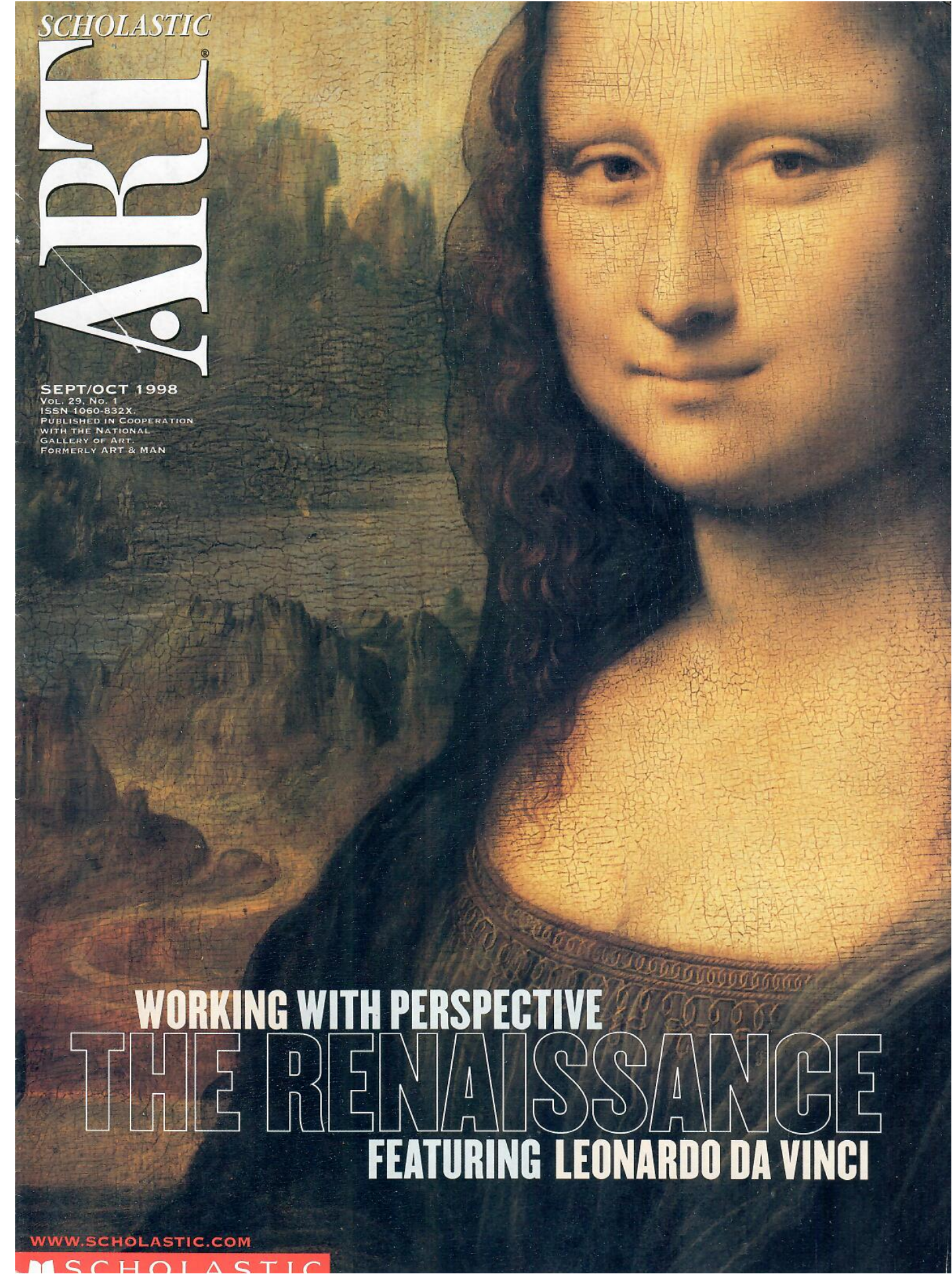
ISSN 1060-832X

PUBLISHED IN COOPERATION

WITH THE NATIONAL

GALLERY OF ART.

FORMERLY ART & MAN



WORKING WITH PERSPECTIVE
THE RENAISSANCE
FEATURING LEONARDO DA VINCI

WWW.SCHOLASTIC.COM

SCHOLASTIC



COVER: Leonardo da Vinci
(1452-1519). *Mona Lisa (La Gioconda)*,
1503. 31" x 21". Louvre, Paris.
Photo, Art Resource.

SCHOLASTIC
ART

Maurice R. Robinson, founder of
Scholastic Inc., 1895-1982

FOR THE NATIONAL
GALLERY OF ART
Director EARL A. POWELL, III

Head of
Education LINDA DOWNS
Head, Education
Resources RUTH R. PERLIN

FOR SCHOLASTIC INC.

President, Chief Executive Officer, Chairman of the Board
RICHARD ROBINSON

Editor MARGARET HOWLETT

Managing Art Director RUSSELL COHEN

Photo Editor DIANA GONGORA

Contributing Editors SUZANNE BILYEU

DENISE WILLI

Production Editor SUZANNE McCABE

Copy Chief RENEE GLASER

Executive VP, Publisher HUGH ROOME

VP, Editor in Chief DAVID GODDY

Director, Editorial Design AUDREY SHACHNOW

Director of Photography SUSAN VERMAZEN

Executive Production Director RICHARD WALSH

Director, Manuf. & Distrib. J. G. BROWNELL

Assoc. Director, Manuf. & Distrib. GAY SICCARDI

Manufacturing Manager LAURA DAVIDSON

Editorial Systems Manager DAVID HENDRICKSON

VP, Telemarketing GREG WORRELL

SCHOLASTIC ART ADVISORY BOARD:

Lana Beverlin, Harrison R. IV School, Gilman City, Missouri •
• Carol Little, Charles F. Patton Middle School, Kennett
Square, Pennsylvania • Lydia Narkiewicz, Pioneer High School,
Whittier, California • Sue Rothermel, Wynford Middle School,
Bucyrus, Ohio

POSTAL INFORMATION

Scholastic Art® (ISSN 1060-832X; in Canada, 2-c no. 9360) is
published six times during the school year, Sept./Oct., Nov.,
Dec./Jan., Feb., Mar., Apr./May, by Scholastic Inc. Office of
Publication: 2931 E. McCarty Street, P.O. Box 3710, Jefferson
City, MO 65102-3710. Periodical postage paid at Jefferson City,
MO 65101 and at additional offices. Postmasters: Send notice of
address changes to SCHOLASTIC ART, 2931 East McCarty St.
P.O. Box 3710 Jefferson City, MO 65102-3710.

PUBLISHING INFORMATION

U.S. prices: \$8.45 each per school year, for 10 or more
subscriptions to the same address. 1-9 subscriptions, each: \$19.00
student, \$34.00 Teacher's Edition, per school year. Single copy:
\$5.50 student, \$6.50 Teacher's. (For Canadian pricing, write our
Canadian office, address below.) Subscription communications
should be addressed to SCHOLASTIC ART, Scholastic Inc., 2931
East McCarty Street, P.O. Box 3710, Jefferson City, MO 65102-
3710 or by calling 1-800-631-1586. Communications
relating to editorial matter should be addressed to Margaret Howlett,
SCHOLASTIC ART, 555 Broadway, New York, N.Y. 10012-3999.
Art@Scholastic.com. Canadian address: Scholastic-TAB Publications,
Ltd., 123 Newkirk Rd., Richmond Hill, Ontario L4C 3G5. Available
on microfilm through Xerox University Microfilms, Inc. 300 N. Zeeb
Rd., Ann Arbor, MI 48106. Also available on microfiche through Bell
& Howell Micro Photo Division, Old Mansfield Rd., Wooster, OH
44691. Copyright © 1998 by Scholastic Inc. All Rights Reserved.
Material in this issue may not be reproduced in whole or in part in
any form or format without special permission from the publisher.

Printed in U.S.A.

NEW POINTS OF VIEW

RENAISSANCE ARTISTS USED PERSPECTIVE
TO CHANGE THE WAY WE SEE THE WORLD



When the huge wall-size fresco
(above right) was finished in
1510, everyone who saw it was
amazed. The scene was so lifelike
it was hard to tell where the
architecture ended and the series of
painted arches began. And the lifesize
figures looked so real they could
have come from the streets
outside. The young artist,
Raphael, had been a perfect
choice after all.

At the beginning of the
16th century, St. Peter's
Church complex was
being rebuilt. The pope
was bringing to Rome all
the best Italian artists and

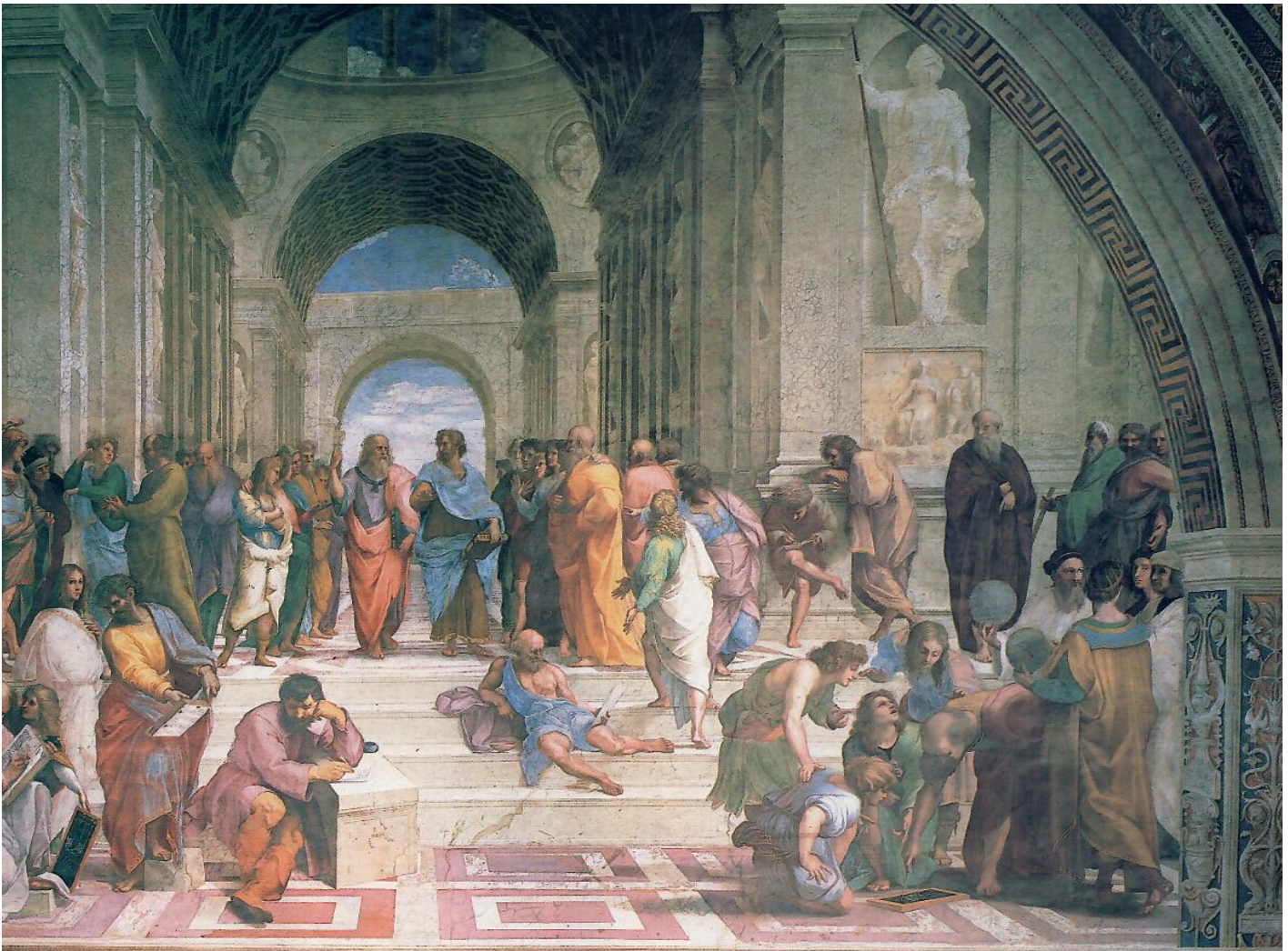
architects to work on this massive project.
He had chosen 24-year-old Raphael to
decorate the walls of his library. The young
artist wanted to prove himself, so he
included in his fresco all the great thinkers
who had written the books that were to be
put on the shelves below. In *The School
of Athens*, the bearded figure on
the left at the top of the stairs
represents the ancient,
Greek philosopher Plato.
On the right, Raphael
placed the philosopher
Aristotle and his
followers.

Viewers of the time
recognized the faces
Raphael gave these
figures. The painting is a
"who's who" of the
Renaissance art world.
All the major painters,
sculptors, and architects

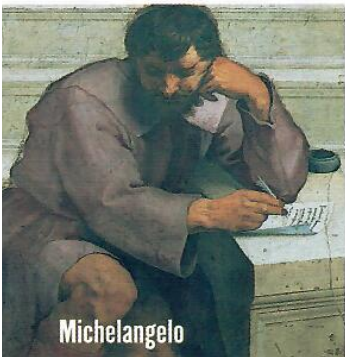


Early figures were done without
using perspective.

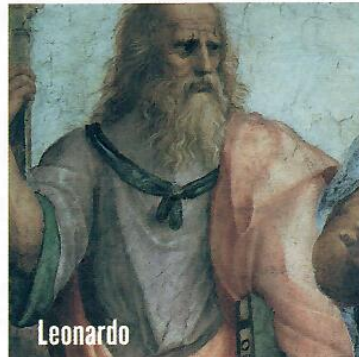
Bernardo Daddi, (c. 1290-c. 1349).
*Madonna and Child with Saints and
Angels*, 1330s. 19 3/4" x 9 1/2".
National Gallery of Art, Washington, D. C.



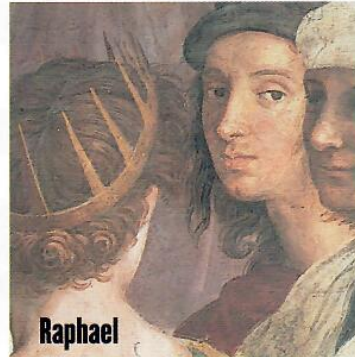
Raphael (1483-1520), *School of Athens*, Stanza della Segnatura, 1508-10. Vatican, Rome. Photo Art Resource.



Michelangelo



Leonardo



Raphael

These details from the work above show three artists who helped make the Renaissance a very important period in the history of art.

are here—including *Leonardo da Vinci* (Plato), who did the painting on the cover. *Michelangelo* is the brooding figure sitting in the center foreground. *Raphael* is the second figure on the extreme right.

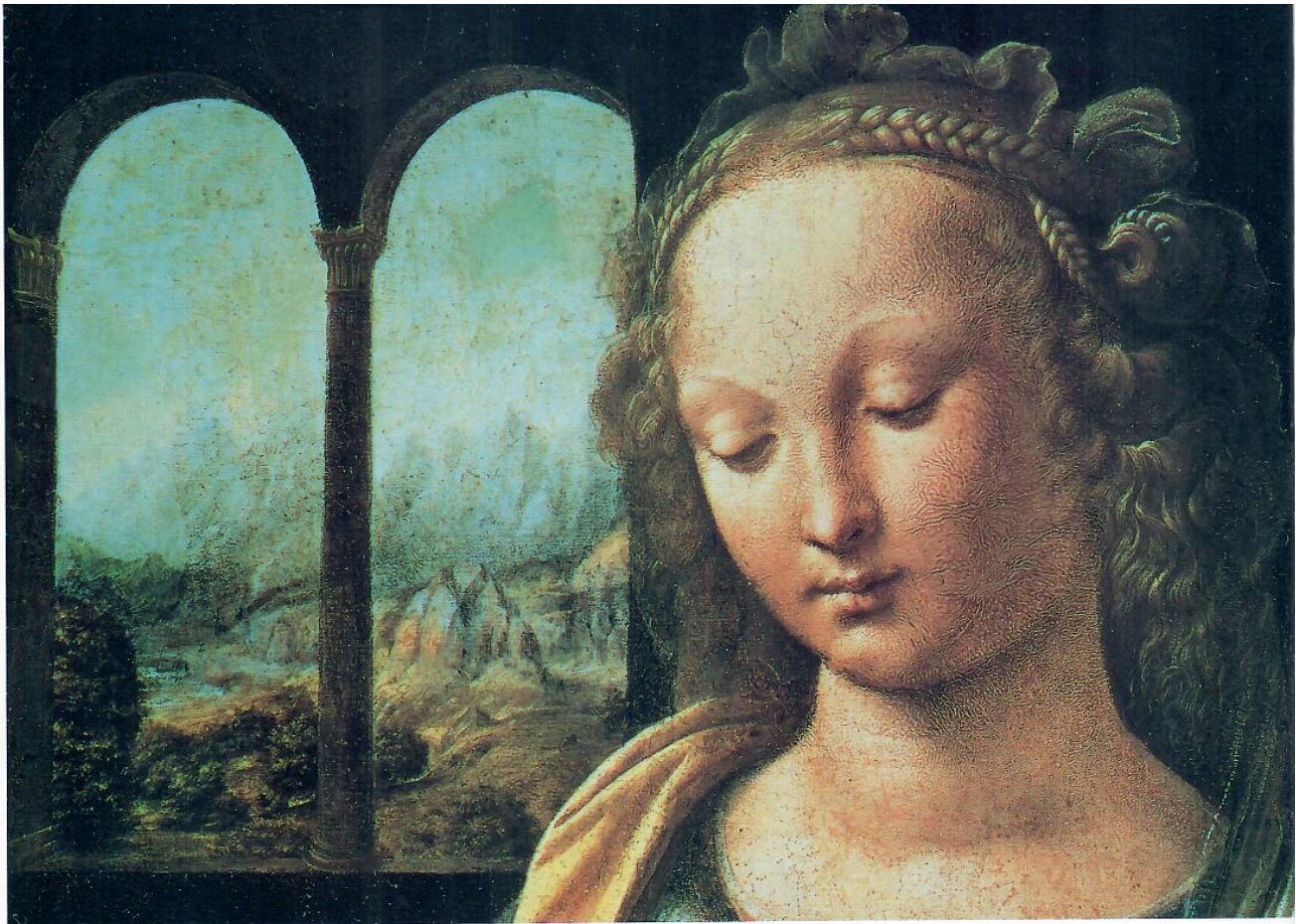
Raphael painted this scene at the height of a very creative period in European history. During this time—known as the *Renaissance* (c. 1400-1600)—there was a new interest in learning, literature, and art. Visual artists

developed new, highly effective ways of representing reality. The most important of these systems—*perspective*—allowed Renaissance artists to create the **illusion of deep space on a flat surface**.

Compare a work (left) painted before the Renaissance, with *The School of Athens*. The early work is **sacred** and **symbolic**, the figures **simplified** and **stylized**. The background is **flat**, the setting **stagelike**. Because the two central

figures are the most important, the artist has made them larger than the others.

Raphael's *School of Athens* is set in real space. The two central figures are actually smaller than most of the others. But when you look at this fresco, where does your eye go? Raphael's use of perspective not only makes the scene appear real; it directs the viewer's attention to the most important part of the painting, the two figures in the center.



Leonardo da Vinci. *Madonna and Child with Carnation*, c.1472. Oil on panel. 24 1/2" X 18 1/2". Alte Pinakothek, Munich. Photo, Art Resource.

RECREATING R

Perspective, a Renaissance technique developed 600 years ago, is so effective we still use it today.

We may work with computers, film, and special optical effects, but the idea of creating the illusion of depth on a flat surface remains the same. If you know perspective, you can visually represent objects in space in almost any medium.

During the Renaissance, artists worked for ruling families or for the Catholic Church. In 1426, the 25-year-old painter Masaccio (Ma-SAH-chio) was hired to paint a *fresco* (a painting done on plaster)

on the wall of a church in Florence. This work (top right) was to include Christ on the cross, God the Father, and two saints. Sacred subjects had been represented in the same way for centuries. When he painted *Trinity*, Masaccio wanted viewers to become involved in the drama taking place. **One-point perspective** enabled him to build an entirely lifelike scene.

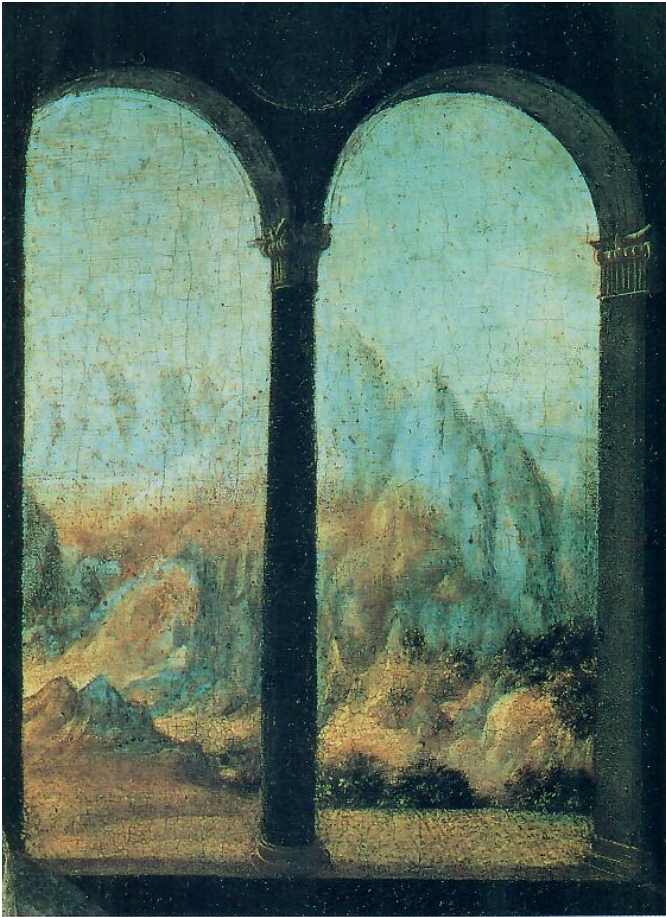
Masaccio began by establishing an imaginary line on the viewer's eye level—the **horizon line** (at the base of the cross). In the center of this line is the **vanishing point**—the point at which lines leading

into the distance seem to meet and disappear. *The School of Athens* (page 3) is also in one-point perspective. The vanishing point is between the two central figures. People in the foreground are large in **scale**; they **overlap** the smaller ones in the middle and backgrounds.

The horizon line in the detail (above) from Leonardo da Vinci's *Madonna and Child* is above the window sill at the base of the mountains. Leonardo developed a technique—**aerial perspective**—for showing distance outdoors. The figures closest to the viewer—the Madonna and

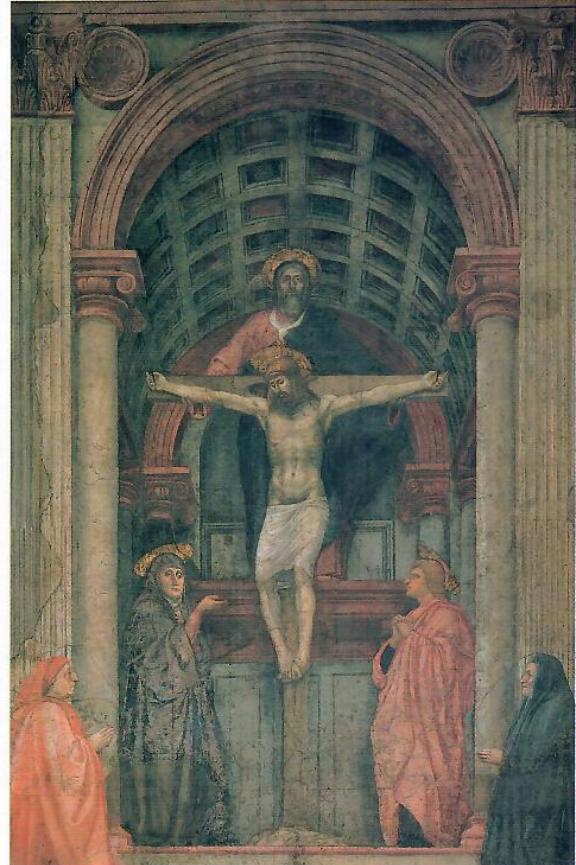
“A study of perspective is the most important of human disciplines!”

—Leonardo da Vinci



Aerial perspective enabled Leonardo da Vinci to paint his haunting and mysterious landscape backgrounds.

Linear perspective allowed Masaccio to show religious subjects in a real setting.



Masaccio (1401-1428), *Trinity with the Virgin and St. John*. 1426. Santa Maria Novella, Florence. Photo, Art Resource.

EALITY

the *Mona Lisa* (cover)—are clear and bright. The light, hazy, bluish mountains in back fade into the distance.

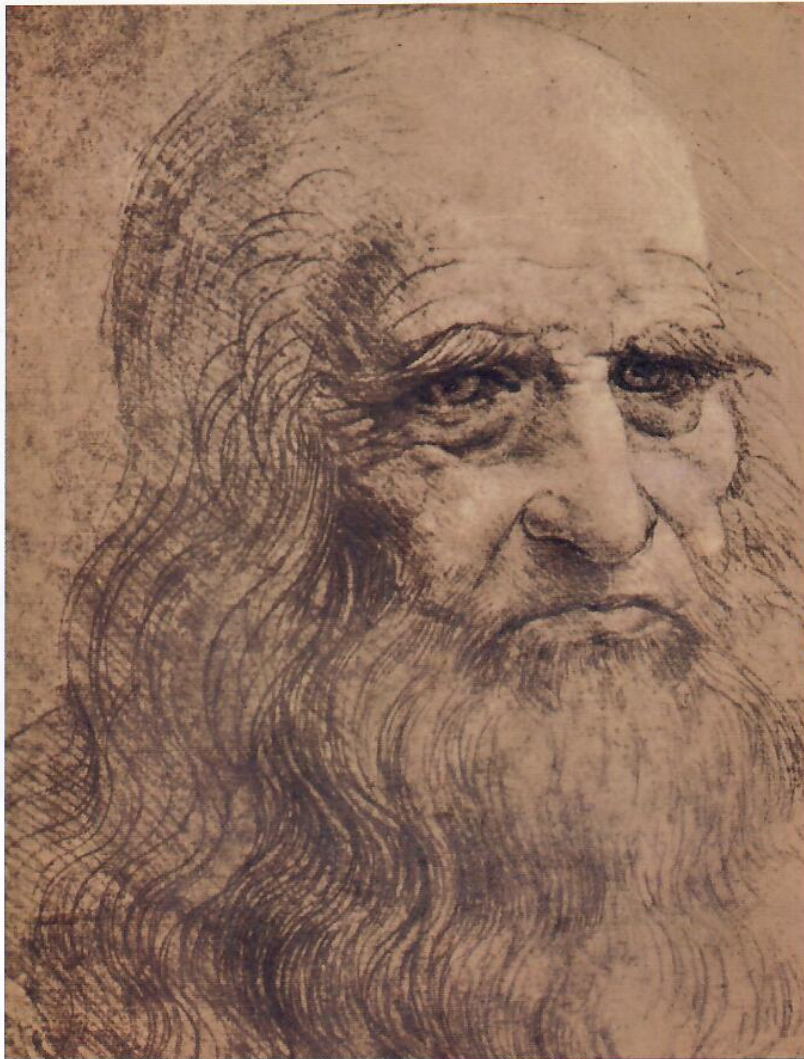
While Raphael was painting *The School of Athens*, in a room nearby, another Renaissance giant was creating his masterpiece. To make his huge figures on the ceiling of the Sistine Chapel come alive, Michelangelo used a perspective device called **foreshortening**. Because his hands are so large, the figure of God (right) seems to come out of the ceiling. By enlarging the parts closest to the viewer, Renaissance artists could make their figures look three-dimensional.



Michelangelo (1475-1564), *Separation of Earth from Water, Sistine Chapel*, (detail), 1508-12, Vatican, Rome. Photo, Art Resource.

Michelangelo used foreshortening to create his powerful and dramatic figures.

LEONARDO DA VINCI RENAISSANCE MAN



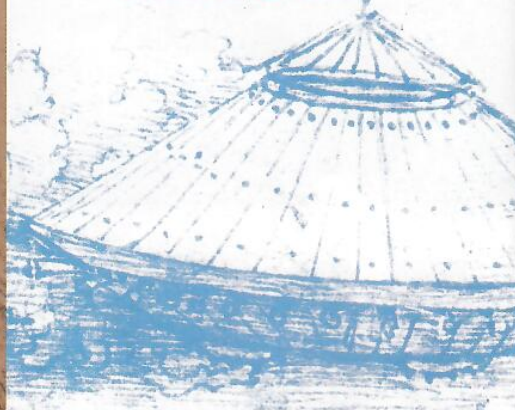
Compare Raphael's portrait of Leonardo on page 3, with the artist's own self portrait.
Leonardo da Vinci. Self-portrait, 1514.

The detail on our cover is probably the best-known image in all art—*Mona Lisa*—created by Renaissance artist Leonardo da Vinci. You may recognize her face with its famous smile in the painting's **foreground**. A twisting road winds through the **middleground**, and the

shadowy mountain range behind is in the **background**. Everything about this painting is mysterious, including the identity of the subject. She is thought to have been Lisa del Giocondo, wife of a Florentine banker. Begun around 1503, Leonardo kept the unfinished

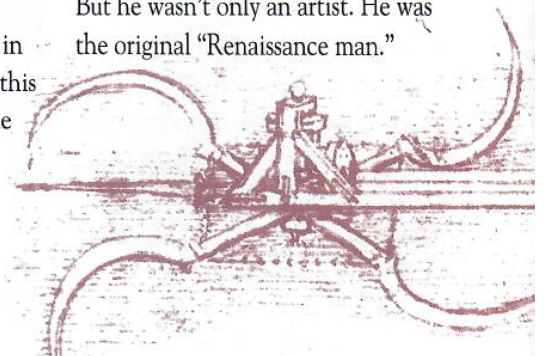
**“To be an artist,
you must know the
forms of everything
on earth, in all their
infinite variety.”**

—Leonardo da Vinci

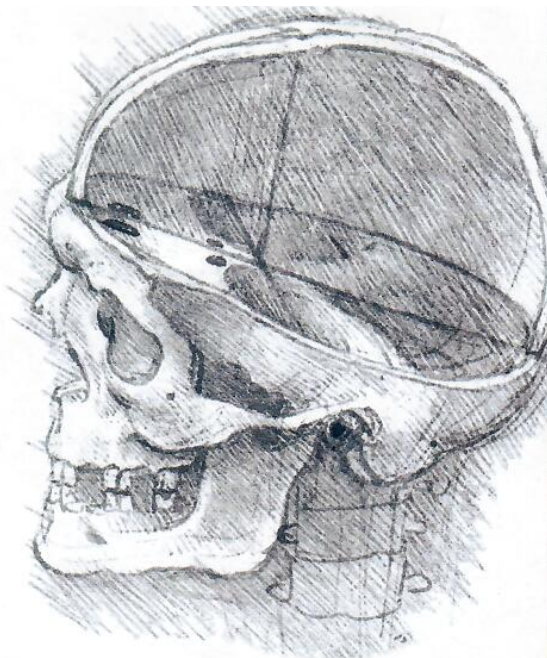


painting with him throughout his life, working on it from time to time. *Mona Lisa*'s intense gaze, mysterious expression, and the fantastic dream-like landscape behind her have fascinated people for the last 500 years.

Leonardo da Vinci painted some of the most important works ever created. But he wasn't only an artist. He was the original “Renaissance man.”

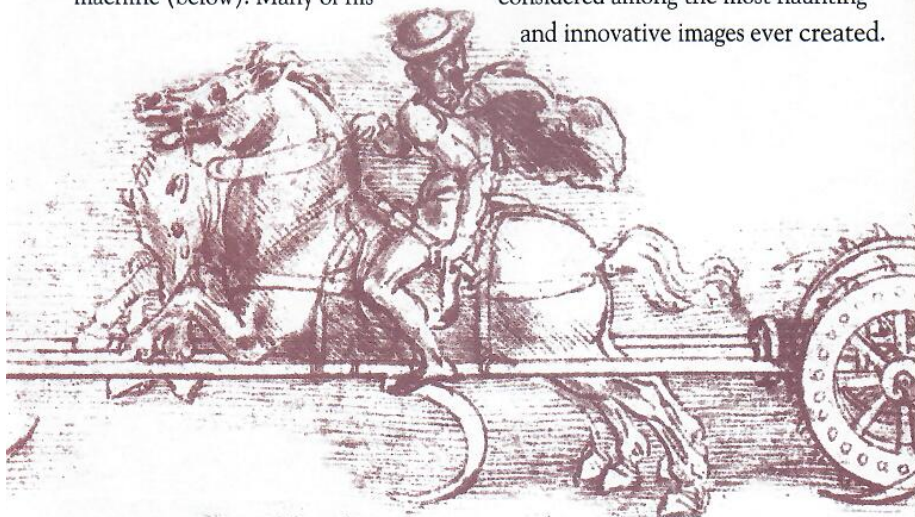


Inventor, mathematician, philosopher, engineer, musician, biologist, botanist, Leonardo was born in 1452 in the small Italian town of Vinci. He showed such early talent that his father sent him to Florence to study in an artist's studio. His work quickly surpassed that of his teacher, so Leonardo set up his own studio and began getting commissions. But the artist had so many interests, he rarely finished anything. He would start a project, then go to something else, moving constantly from city to city. He wrote down many of his thoughts and ideas—thousands of pages which fill dozens of notebooks. His surviving works are primarily drawings, like that of an early tank (opposite page), an anatomical study (above), and a war machine (below). Many of his



inventions foreshadowed devices that would be developed hundreds of years later—airplanes, helicopters, automobiles, submarines.

Leonardo was one of the most brilliant and talented artists of the Renaissance or any other era. Toward the end of his life he left Italy for France, where he died in 1519. Today, only a handful of his paintings remain. Most of them are unfinished—like *Mona Lisa*—or damaged almost beyond repair—like *The Last Supper* (pages 8-9). But those few are considered among the most haunting and innovative images ever created.



ABOUT PAGES 8-9 BRINGING A LOST MASTERPIECE TO LIFE

Restoration work began on one of Leonardo's most famous works as soon as he stopped working on it in 1497. And it has continued ever since.

Leonardo da Vinci was always experimenting with new materials and techniques. To create *The Last Supper* (pages 8-9), he mixed oil and tempera paint. Before the mural was even done, the paint began to flake off the wall. A modern team of art experts has spent the last 20 years removing layers of dirt, glue, and paint in the hope of uncovering Leonardo's original painting. This is seven times longer than it took Leonardo to create the mural. What is it about this work that inspires people to expend such time and effort?

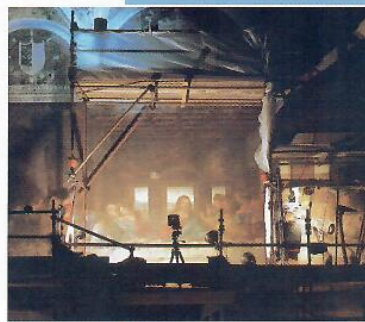
In 1495, Leonardo da Vinci received a commission from the Church to paint a giant mural. The work was to be done on the wall of a convent dining room in the city of Milan. The subject would be based on The Last Supper—a very important story in the Christian religion. It refers to the last meal eaten by Christ before one of his followers was going to betray him. In this work, Leonardo wanted to sum up his studies in

optics, architecture, color, technique, and perspective. Above all, he wanted the scene to seem real.

To make this mural appear to be part of the room, the artist extended his perspective beyond the painted figures. The dishes in the painting are similar to real ones used in the dining hall. And all the light in the painting falls from the right,

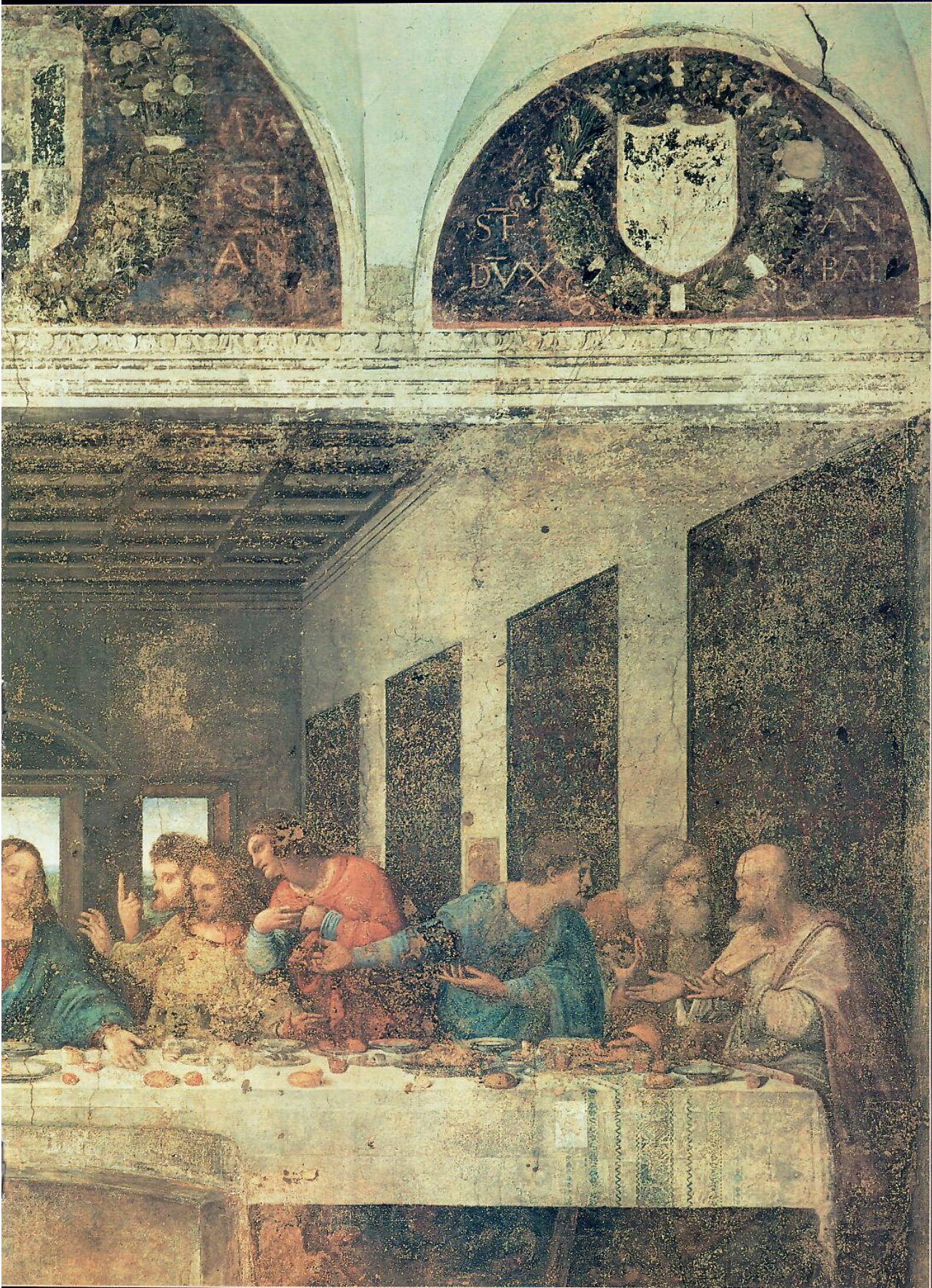
as though actually coming through the dining room's single window.

The dramatic use of **one-point linear perspective** serves as a setting for the psychological drama being presented. Twelve emotional figures, all gesturing in disbelief, surround the strong, calm figure of Christ placed in the exact center of the painting. Everything in the composition leads to the focal point of the picture—Christ's face. All the receding lines meet at the mural's vanishing point, located right behind the face. The window in back sets off Christ's figure, while the arch above his head acts almost as a halo, emphasizing his spirituality.



The Last Supper has been restored six times. This new restoration is still going on. Leonardo da Vinci. *The Last Supper*, 1495-98. Santa Maria delle Grazie, Milan.





9
“In this work, I hope to gather together all my experiments in optics, musical harmony, anatomy, architecture, color, and perspective as well as materials and techniques.”—Leonardo da Vinci

A Tale of Three Cities

Three perspectives on modern cities



Richard Estes, b. 1936. *Holland Hotel*, 1984. Oil on canvas, 45" x 71 1/2". Louis K. Meisel Gallery, NY, NY.

Endless Streets

Compare the painting above by contemporary American Richard Estes with *The School of Athens* (page 3) and *The Last Supper* (pages 8-9). *Holland Hotel* was made five centuries after

“As your eyes move the vanishing point moves. To have only one vanishing point is not realistic.”

—Richard Estes

the other two works. But all three are based on the same system of **one-point perspective**. The camera was one of the many advances made over the centuries. Why did Estes spend the time it took to

paint this cityscape instead of just taking a photograph?

Holland Hotel may look like a photograph, but no photo

could produce the effect that this work does. The perspective on the left is straightforward. The viewer looks down the street toward the **vanishing point**. The buildings are highly detailed and complex. Unlike a photo, each detail is in **sharp focus**.

Now cover the left part of the painting. What kind of feeling does the right side give you? Each store window reflects a piece of the cityscape. Every fragment is in a **different perspective**, and has a different **vanishing point**. The reflections disappear and merge with objects inside the windows. The city seems distorted and split. Renaissance artists used perspective to represent a calm, perfect world. Today, many contemporary artists like Richard Estes use perspective to create images that suggest a modern sense of uncertainty and confusion.

Reaching for the Sky

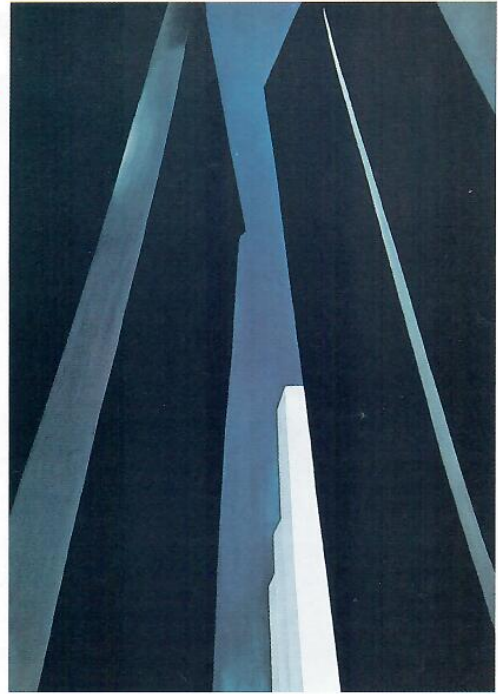
The painting (right) by 20th-century American artist Georgia O'Keeffe has something in common with the Renaissance fresco by Masaccio on page 5.

“The buildings on Park Avenue seemed to stretch into infinity.”

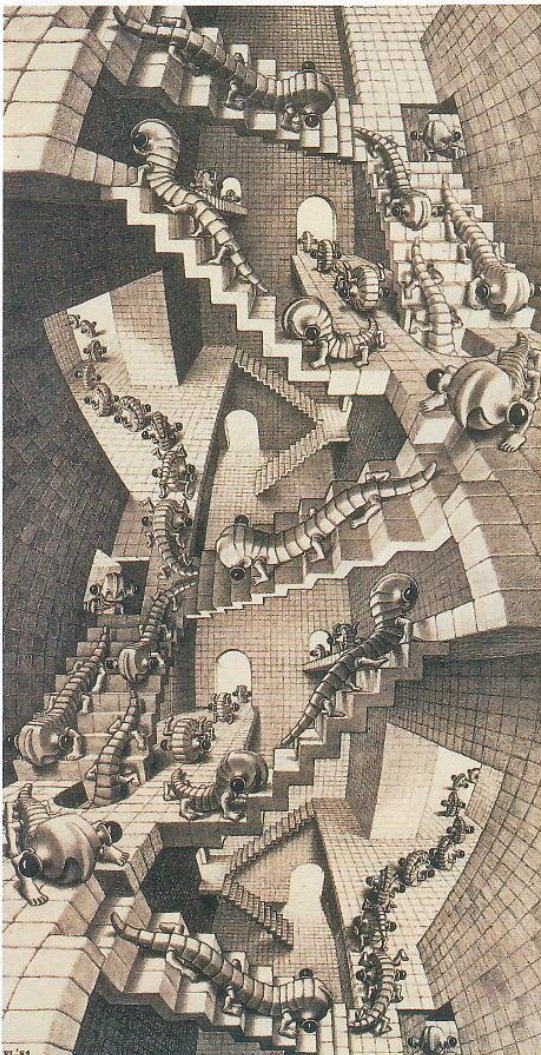
—Georgia O'Keeffe

The subjects, the styles, the purposes of each work couldn't be more different. But both works are similar in one important respect. Where do you think the viewer is standing in each painting? What is the point of view?

By now, you've probably noticed that both artists have painted their scenes from below. Masaccio wanted his viewers to look up at and relate to his lifelike religious figures. Wisconsin-born Georgia O'Keeffe wanted her viewers to feel the same emotions she felt when looking up at the buildings in a big city. When she painted *City Night*, the artist was at the beginning of her career and living in New York. O'Keeffe has used a **low angle of vision** and **flat, simplified shapes** to make her skyscrapers look tall and overwhelming. Her **stylized perspective**, and **angular shapes** suggest the power and energy of the city.



Georgia O'Keeffe (1887-1986). *City Night*, 1926.
Georgia O'Keeffe Foundation.



Cities of the Mind

Twentieth-century Dutch printmaker M.C. Escher was a master of perspective. He could create a completely fantastic city and make it seem almost possible. The stairs in *House of Stairs* (left) lead nowhere. Logically, you know this structure can't possibly exist. But, because Escher has so carefully constructed every small detail, the building takes on the feeling of reality.

Maurits Cornelis Escher is known for the strange, unique world he created in his hundreds of drawings, engravings, and lithographs. In Escher's universe everything is reversed; up is down, front becomes back, shapes turn into spaces. The artist used classical perspective to construct *House of Stairs*. He used **two vanishing points** to render each room, hall, and stairway.

“If we are going to construct a universe, it should be completely convincing.”

—M. C. Escher

Escher followed every rule of perspective to create this work except one. Instead of making the lines running up and down **straight**, he **curved** them. This distorts the whole structure. Stairs go into walls, doorways are in floors, halls become ceilings. If you look at the top and bottom of the print, you can see the central image is repeated and reversed. And so this city seems never to end.

M. C. Escher, *House of Stairs*. Lithograph, 1951.
© 1998 Cordon Art, Baarn, Holland. All rights reserved.

ART OF THE MONTH

Kelli Weniger

Getting Things in Perspective



Kelli Weniger, a senior at Augusta High School in Kansas, loves to work with colored pencils. “You can do a lot with them,” she says. “But your colors have to be just right. Otherwise, the whole thing just fades away.” Colored pencil is the medium the 17-year-old artist used to create her award-winning perspective drawing on the right.

When she’s not drawing, Kelli works as a waitress at a local restaurant. She hopes to go to college, then pursue an art career. “I’d like to major in graphic design. It’s an exciting field—always changing. You can work day after day and never do the same thing twice.”

What is it about art that you love?

I can’t imagine doing anything else. Art has been my one love since I was in grade school. Whatever idea I come up with, I feel I can create.

Where did you get your idea for this work?

It was a class assignment. We were to draw a building using our own composition. So I got my camera and started taking pictures of buildings at certain angles. One night around dusk, I saw the sun streaming through this alley. I loved the contrast of the bright sun and the angle of the dark shadows running along the walls of the buildings. It was really unique looking. I decided to do my picture that way.

Is this a real place?

The building is in El Dorado, a small town outside Augusta. It’s in the business district on one of the main

streets. I based my picture on it, but I changed a few things. I added an open window, bushes, and some other details I thought should be there. I emphasized the contrast between light and dark and made the colors brighter. But I wanted people to be able to recognize it as the building in El Dorado.

How did you begin?

Initially, I was having trouble figuring out how to lay out my picture. I didn’t want a straight-on view of the building. I wanted to show it from a dramatic point of view. My teacher suggested using a vanishing point. When we chose that point—on the very left edge at the bottom of the frame—it made the





picture a lot easier to map out. The lines of the bricks, the windows, and the boards on the bottom all meet at that point. Putting the vanishing point there made the lines of the building seem more extreme.

What did you do then?

I took the basic dimensions of the building and drew them lightly in pencil. I studied the way the pillars and poles worked and drew them in. Then I started blocking in the areas of light and dark. After I'd put on a wash of black, I began working with color. With colored pencil, I generally do a section at a time, usually two to three inches square. That way the drawing doesn't seem so overwhelming. From the upper corner I worked my way down so I wouldn't

“One night around dusk, I saw the sun streaming through this alley. I loved the contrast of the bright sun and the angle of the dark shadows running along the walls of the buildings.”

smudge the part I'd finished. Then I did the windows, the pole, and the bushes. The bricks were last. The lines for each brick went to the vanishing point. I did each one individually—four to eight colors for each. It was really detailed and time consuming. I would say I spent maybe two months on the bricks.

How did you choose your colors?

I was trying to capture the feeling of dusk, with the warm glow of the sun and the long shadows. So I used a lot of dark browns and grays for the shadows and light creams, yellows, and oranges for the light. For the tree and bushes I used

dark greens and browns, and yellows and yellow greens to capture the feeling of the sun as it hit the leaves.

Do you have any advice for aspiring artists like yourself?

Don't be afraid to try new ideas. Keep working. The more you work, the better you'll get. The more things you do, the more your own style and technique will show. Just experiment and have fun. Do what you like to do.

We select our Artist of the Month from among thousands of young art-award winners. To enter, ask your teacher to write to The Alliance for Young Artists and Writers, 555 Broadway, New York, NY 10012-3999 for entry deadlines and rules books.

Creating Foreground, Middle Ground, Background

Draw a dramatic scene that has real depth

The Renaissance paintings we have studied in this issue have been in one-point perspective. To understand one-point perspective, imagine you are standing in the middle of a long, straight, empty road. The lines formed by the sides of the road seem to come together at a single vanishing point on the horizon line.

However, most objects and scenes are not in one-point perspective. We see them at odd angles and from many points of view. In this workshop, you'll combine the idea of one-point perspective with other fundamental perspective techniques to create a drawing that captures space and depth.

Materials

- 18" x 24" 60 lb. white sulfite drawing paper
- Ebony pencil
- Vinyl eraser
- Drawing board
- Paper towels
- Masking tape
- Paper stump
- 18" ruler
- Long narrow hallway or still life on tables emphasizing deep space

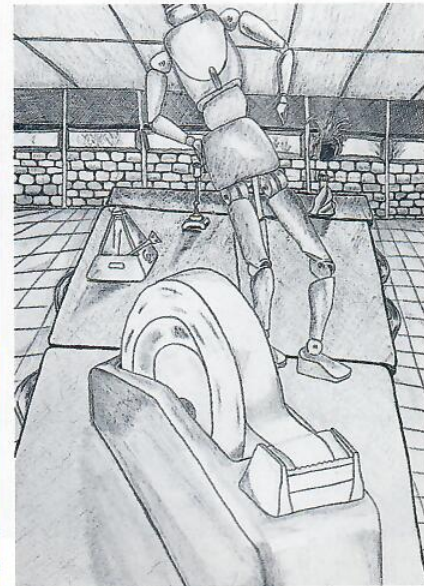


Step 1

Choose an indoor or outdoor setting that emphasizes deep space with distinct foreground, middle ground, and background areas. You can use a long hallway, part of your school building, or set up classroom still lifes. Decide whether your composition will be at, below, or above eye level. How much will be included in your final composition? What will be the focal point of your drawing?

Step 2

Draw the general outside contours of major objects in your composition. Establish room corners, floor, and ceiling lines to help place objects in the composition. You can use a ruler to



help visualize perspective lines that go from objects to the vanishing point, but if you need to draw lines, make sure they are freehand.



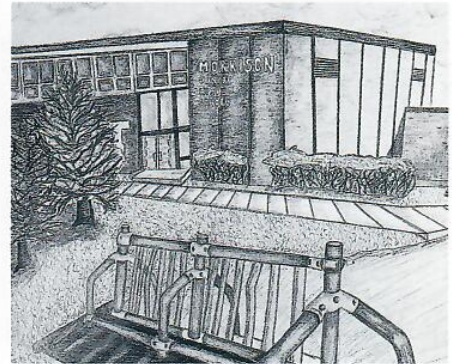
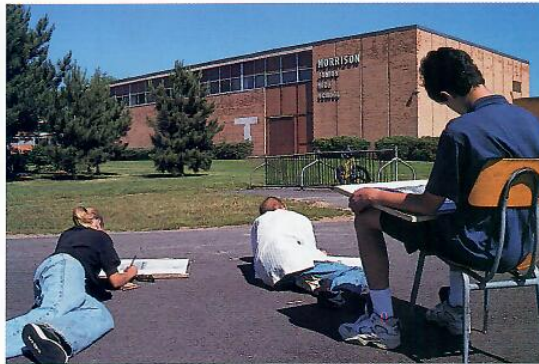
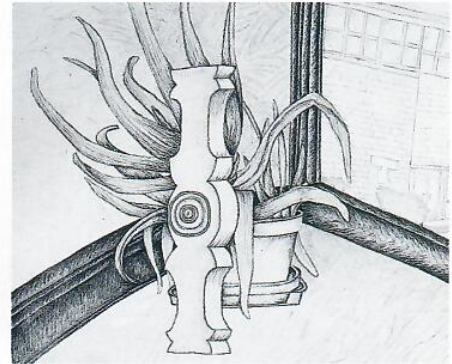
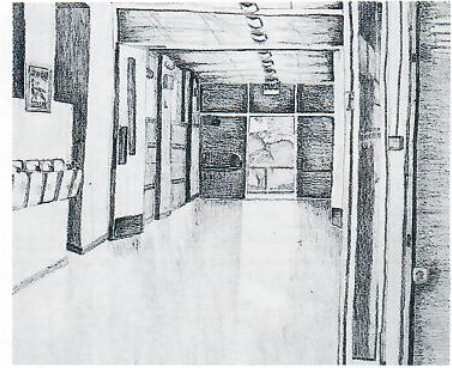
Step 3

Only after general outline of major forms is in place should you begin to add smaller details, shadows, and highlights. Determine the **light source**, and make sure it is consistent.

Distinct **value changes** between foreground, middle ground, and background can help create the feeling of depth. Interesting **surface textures** (crosshatching, paper stump, smudging) can be used to shade objects to indicate form.

Some Solutions

Each of these artists has used perspective techniques in a different way. Which are based on **one-point perspective**? Which may not be? How has **diminution** (objects appear smaller as their distance from the viewer lengthens) enhanced the



feeling of depth in each?

Which artists have most effectively used **foreshortening**? (objects closer to the viewer are larger; as they recede they appear to get shorter)

Convergence (lines that are parallel seem to come together as they go away from the viewer) is most obvious in which drawings? Have any of these artists NOT used **overlapping** to show space and depth? Can you locate the **horizon line** (or eye level) in each of these works? Can you find the location of each **vanishing point** (the place on

the horizon where parallel lines going away from the viewer would finally come together)?

Prepared by Ned J. Nesti, Jr., art instructor, Morrison (IL) High School. Assisted by Tina M. Bastiani, Northern Illinois University.

Photos by Larry Gregory

Drawings by (left to right, top to bottom): Anthony J. Wright; Benjamin J. Boyles; Kimberly A. Deets; Nicholas L. R. Bonneur.

CRITICS CORNER

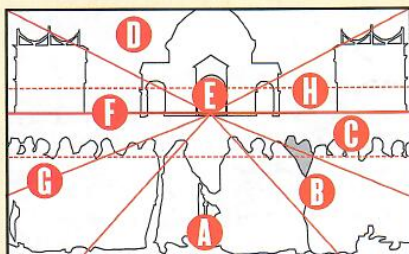
Perugino's Piazza



Renaissance artist Pietro Perugino (Per-roo-GEE-no), who was Raphael's teacher, painted the work below. Compare this fresco, featuring people in a *piazza* (pee-AT-za), an Italian courtyard, with *The School of Athens* on page 3. Choose or list the correct answers to the statements below.



Pietro Perugino (c. 1445/50-1523). *The Delivery of the Keys*, 1482. Fresco in the Sistine Chapel, Vatican, Rome. Photo, Art Resource.



1. Circle the correct letter. This work is in: (a) one-point perspective; (b) two-point perspective; (c) multiple perspective.
2. The settings of both works are: (d) symmetrical; (e) asymmetrical
3. Fill in the answers. Can you name three ways Perugino has shown depth in his painting? (f) _____ (g) _____ (h) _____
4. Following is a list of terms used when rendering a scene in perspective. Locate each in the diagram on the left, and write in the letter that corresponds to the term.

- | | |
|------------------------|-----------------------|
| ___ Horizon line | ___ Background |
| ___ Middle ground | ___ Perspective lines |
| ___ Aerial perspective | ___ Foreground |
| ___ Overlapping | ___ Vanishing point |