

When artists create an image in two dimensions, they are creating an illusion and the techniques used to convey depth and form

VALUE, SPACE, AND PERSPECTIVE



Ralph Goings *Donut* 2006

Value

- An artist's use of value can produce a sense of solidity and influence our mood
 - ◆ The serious mood of these mysteries was enhanced by the filmmaker's choice of dark values-**film noir**
- Artists use dark and light values as tools for creating depth

It also conveys FORM – the 3 dimensionality of an object

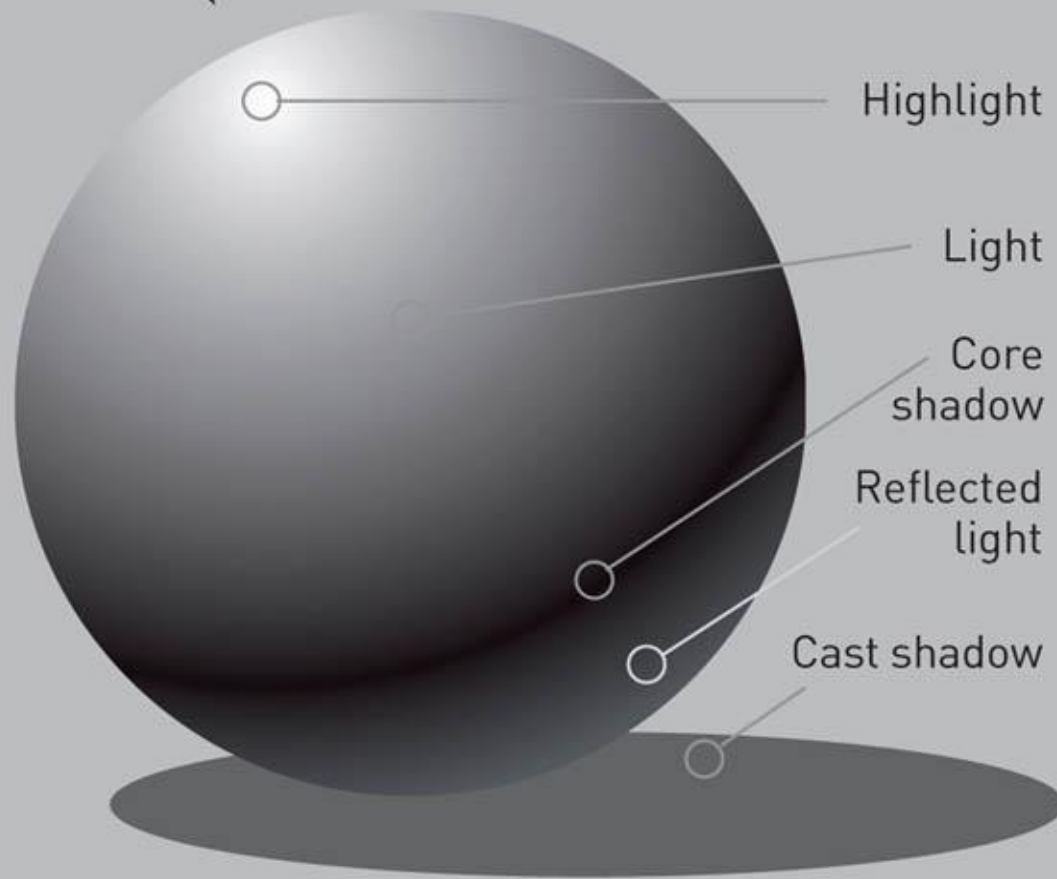
Chiaroscuro

- Italian for “light dark” -implying from light to dark and back again
- A method of applying value to a two-dimensional piece of artwork to create the illusion of three dimensions
- Value can/cannot work in naturalistic light “families”
- Artists identified five distinct areas of light and shadow.
 - ◆ Highlight, light, core shadow, reflected light, and cast shadow



Light source

Chiaroscuro is an effect that creates an illusion of solidity and depth by using five defined values



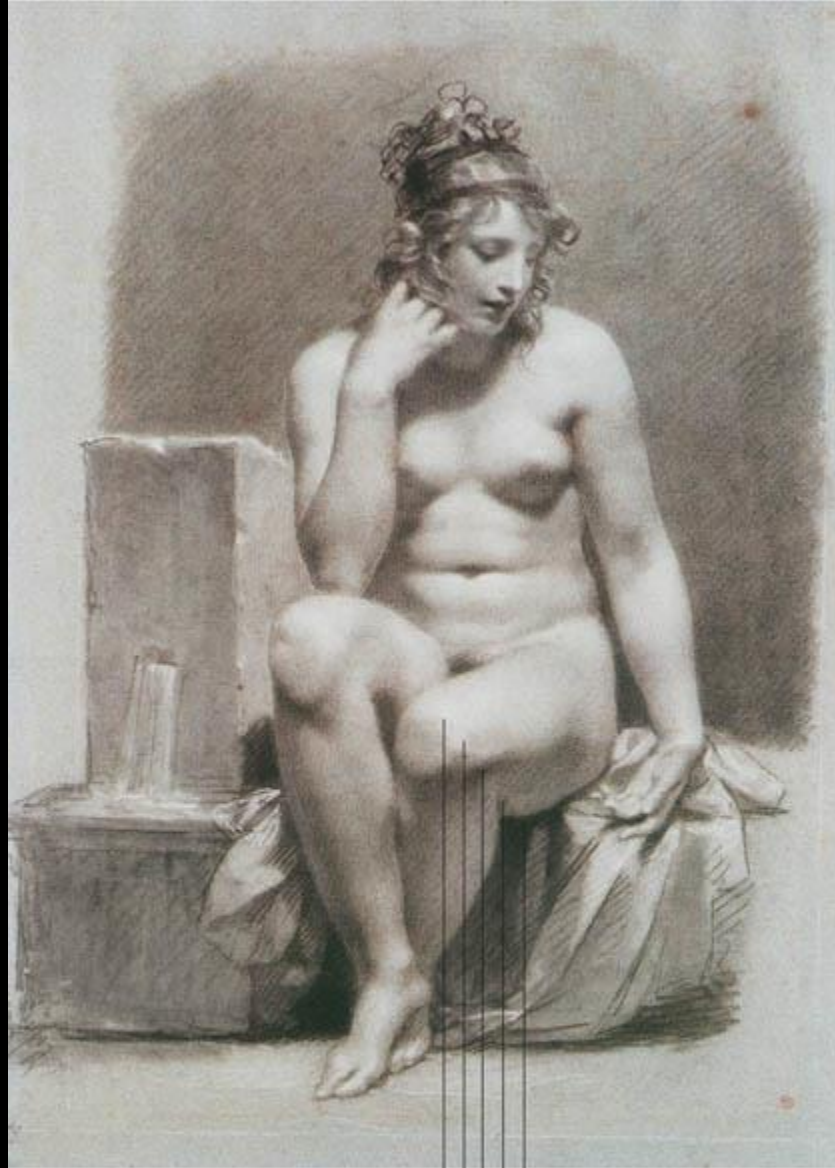
Highlight

Light

Core shadow

Reflected light

Cast shadow



- Highlight
- Light
- Core shadow
- Reflected light
- Cast shadow

Pierre Paul Prud'hon, *Study for La Source*, c. 1801. Black and white chalk on blue paper, 21¾ x 15¼". Sterling and Francine Clark Art Institute, Williamstown, Massachusetts



Caravaggio, *The Calling of St. Matthew*, c. 1599–1600. Oil on canvas, 11'1" x 11'5". Contarelli Chapel, Church of San Luigi dei Franceschi, Rome, Italy



Caravaggio,

***The Calling of St.
Matthew***

- Dramatic effects can be achieved through the use of chiaroscuro
- Along with Rembrandt, one of the masters of this device of dramatic light called **tenebrism**
- Uses strongly contrasting values to convert a quiet gathering into a pivotal and powerful event
 - ◆ The intense difference between lights and darks places extra emphasis on Christ's hand



Anne Leibovitz
Willie Nelson
Portrait

**Here value and
light enhances the
power of the
portrayal
What is she saying
about him?**

Space

**Strategies an artist uses
to create a sense of depth
and the illusion of space:**

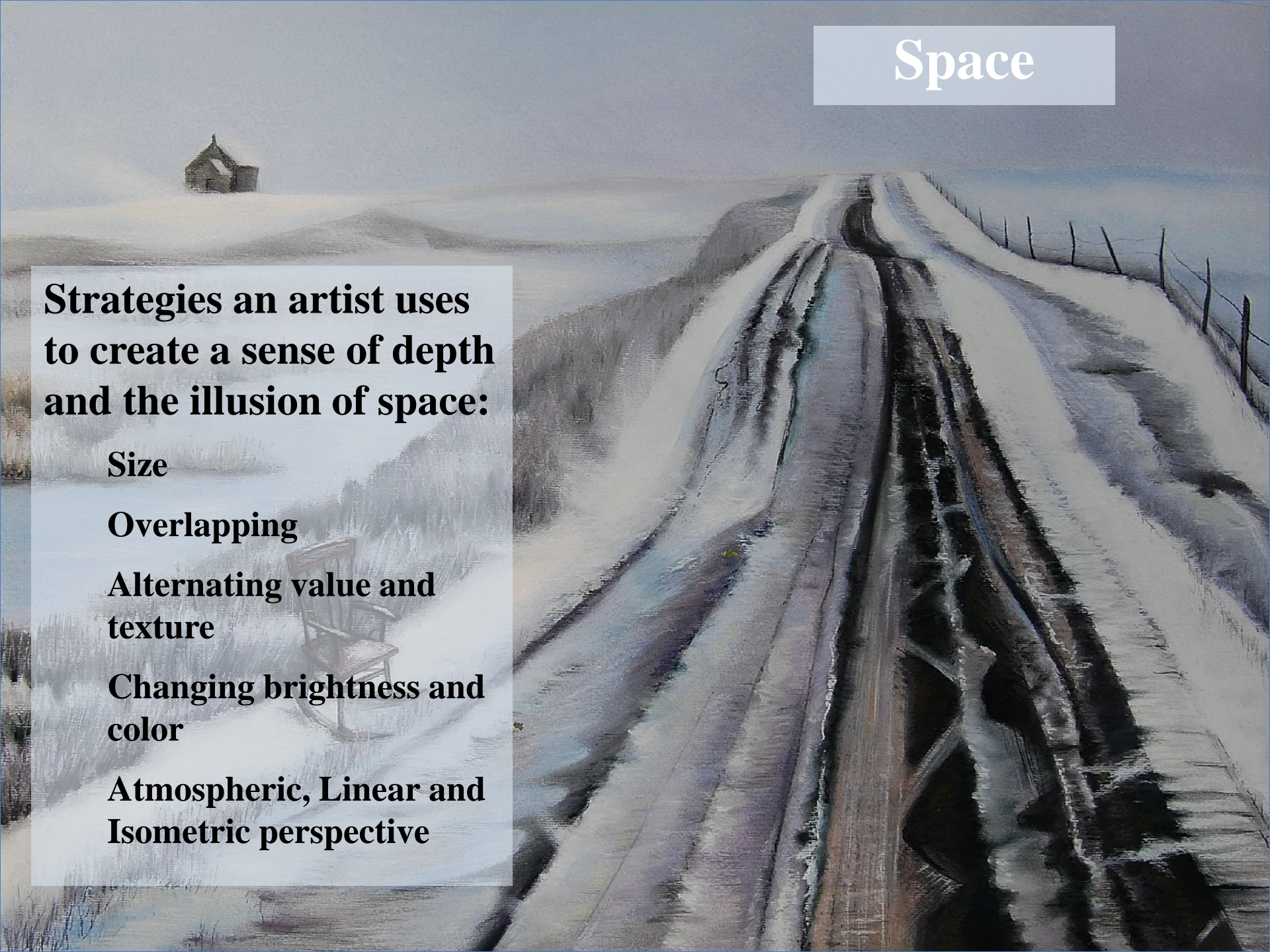
Size

Overlapping

**Alternating value and
texture**

**Changing brightness and
color**

**Atmospheric, Linear and
Isometric perspective**



Size, Overlapping, and Position

- **The size of one shape compared to another often suggests that the larger object is closer to us**
- **If one shape overlaps another, the shape in front seems to be closer**
- **A shape lower in the picture plane appears to be closer**

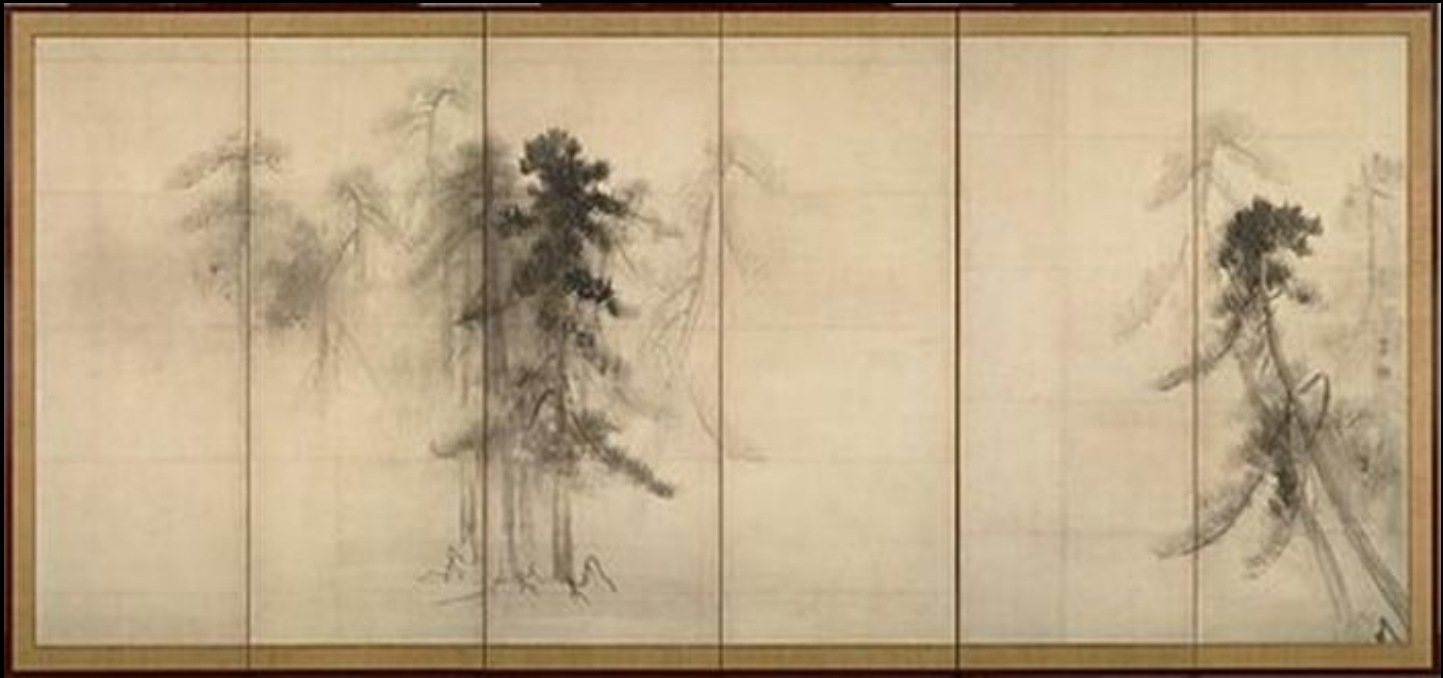


Gustave Caillebotte. *Place de l'Europe on a Rainy Day*. 1876–77.
83 1/2 x 108 3/4 in.

Alternating Value and Texture

Artists intersperse value and visual texture to create a sense of rhythm and create the illusion of space and depth





Hasegawa Tōhaku, Pine Trees, one of a pair of folding screens, Japan, 1593.
(61.73 × 140.16 in)

This also uses atmospheric perspective to create the illusion of depth.

Brightness and Color



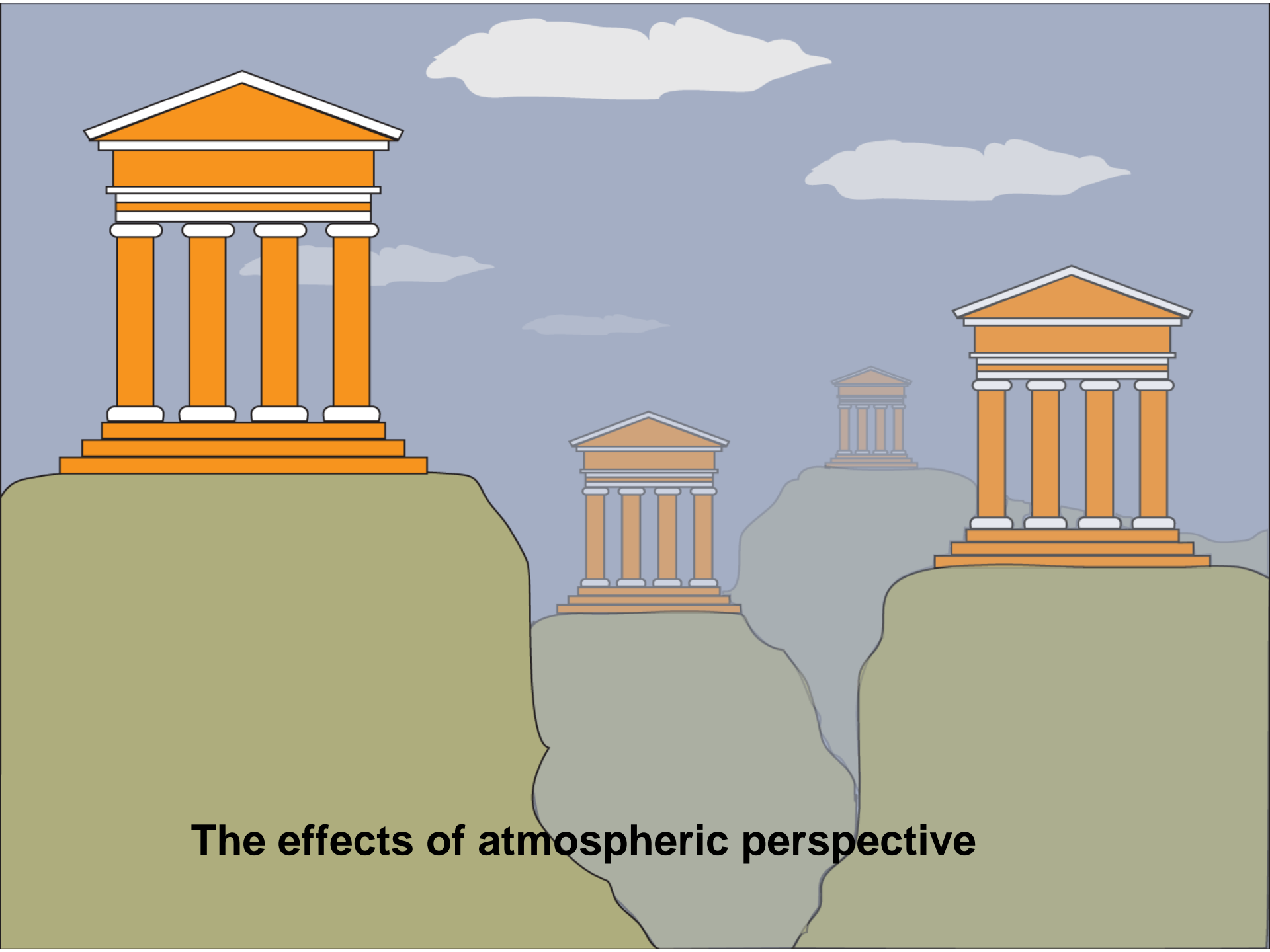
Edward Hopper 1945 *Rooms for Tourists*

Atmospheric Perspective

- Distant objects lack contrast, detail, and sharpness of focus because the air that surrounds us is not completely transparent
- The atmosphere progressively veils a scene as the distance increases
 - ◆ Contemporary filmmakers use this atmospheric effect to give the illusion of great depth

http://www.youtube.com/watch?v=slhnYFRu4ao&feature=player_embedded
The Return of the King





The effects of atmospheric perspective



J. M. W. Turner. *Rain, Steam, and Speed—The Great Western Railway*.

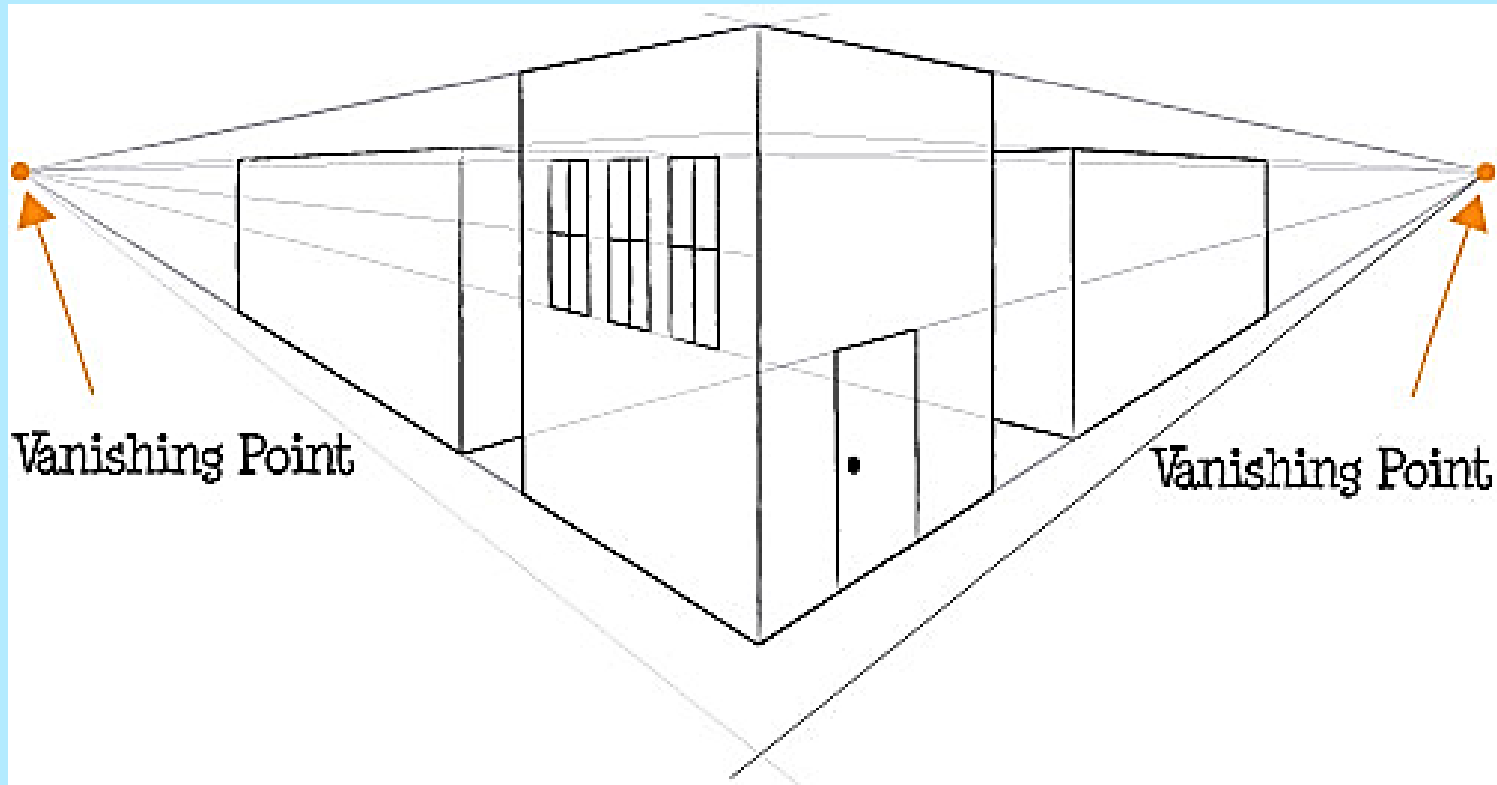
1844.

33 3/4 x 48 in.



Asher Brown Durand, *Kindred Spirits*, 1849. Oil on canvas, 44 x 36". Bentonville, Arkansas

Isometric and Linear Perspective



Artists, architects, and designers who wish to suggest the illusion of depth on a two-dimensional surface use perspective

Isometric perspective uses **parallels** to communicate depth

Linear perspective relies on a system where lines converge at points in space

Isometric Perspective

- **Arranges parallel lines diagonally in a work to give a sense of depth**
- **Very noticeable in work from China and Japan**
- **Derives from the Greek meaning “equal measure”**
 - ◆ **It was particularly suitable for painting on scrolls, which can be examined only in sections**



Screenshot from *The Sims*, a computer simulation game, 2000

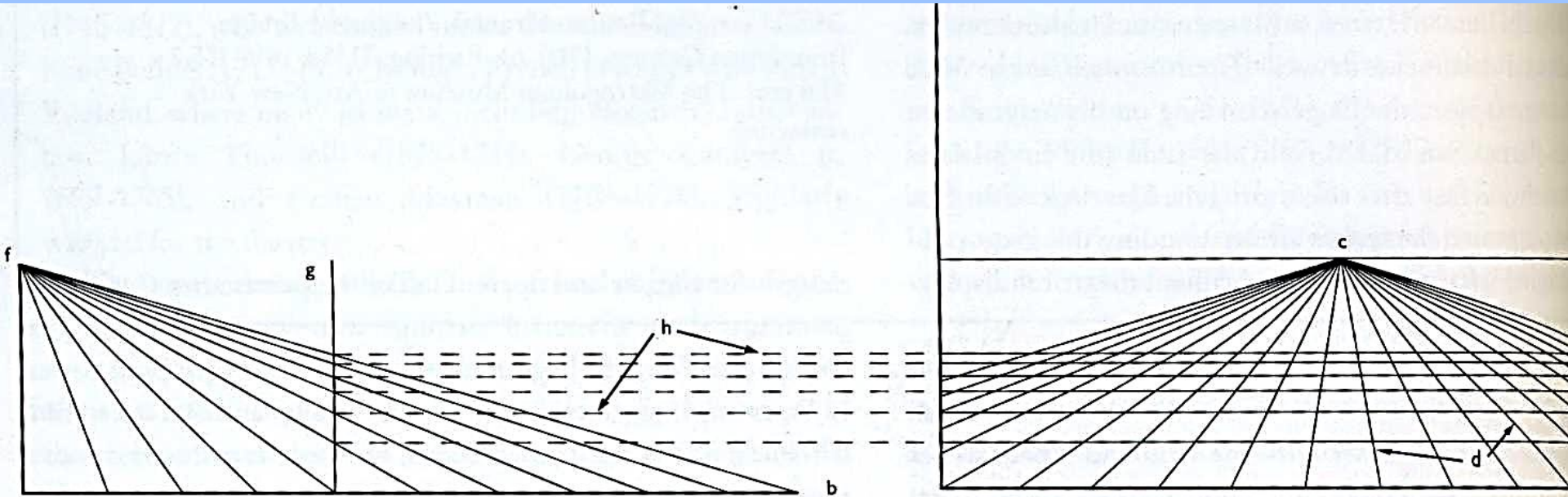
Isometric perspective is common in contemporary computer graphics.

Designers have created the architecture of the game using parallel diagonal lines to make “tiles”

Allows players to manipulate the architecture without distortion the objects **BUT the overall effect is not **naturalistic****

Here it is use to inform with **clarity**

Linear Perspective



PS-40. Design of Leone Battista Alberti's Perspective Construction, according to recent discoveries:

a) height of human being; b) base line; c) vanishing point; d) orthogonals; e) "little space"; f) distance point; g) vertical intersection; h) trans

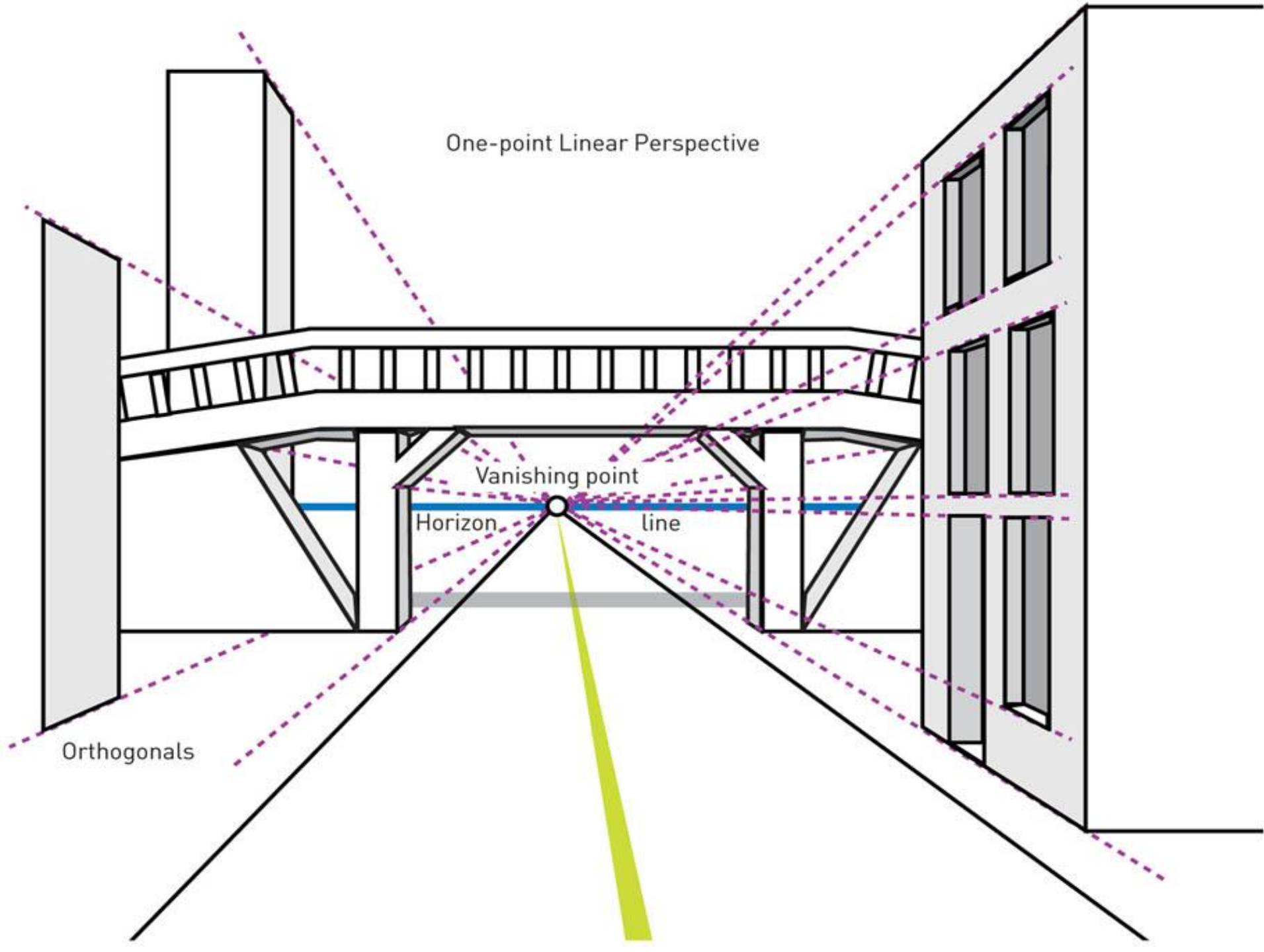
612 PRIMARY SOURCES FOR PART THREE

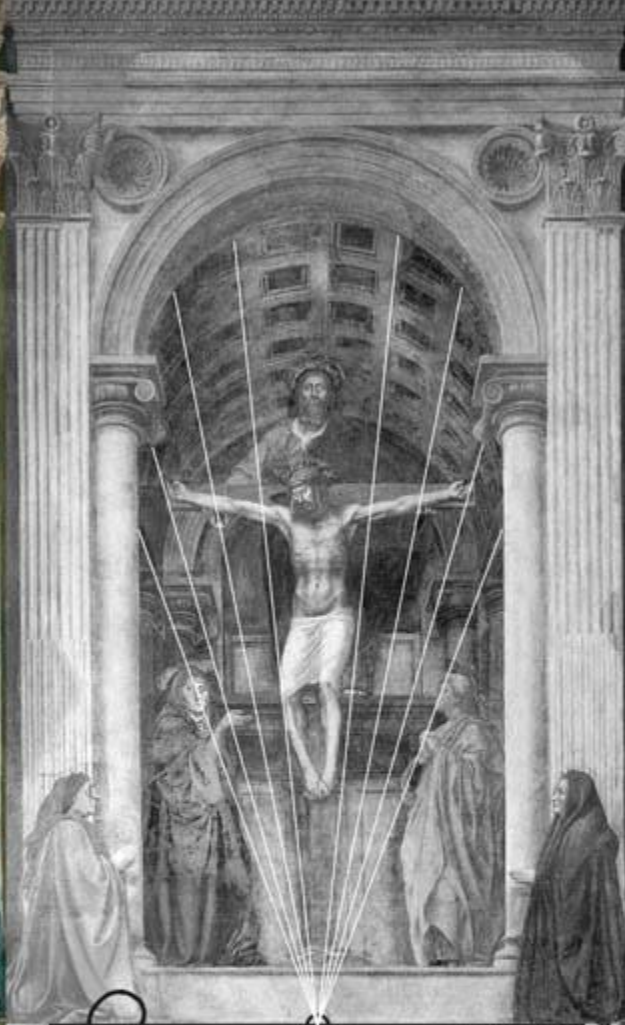
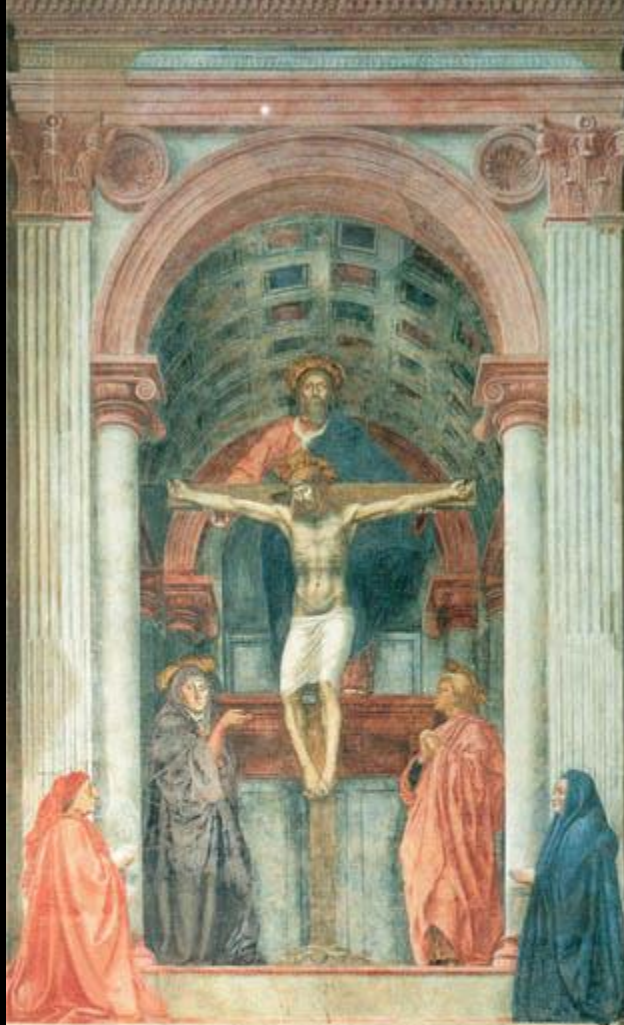
- The theory of linear perspective was developed in detail by the fifteenth-century artist Leon Battista Alberti and refined and codified by Brunelleschi

One-Point Perspective

- **One-point perspective relies on a single vanishing point**
- **Unless the viewer is situated in direct line of sight it is not as easy to see how the perspective creates the illusion of a recession of space**

One-point Linear Perspective





Vanishing
point

Horizon line

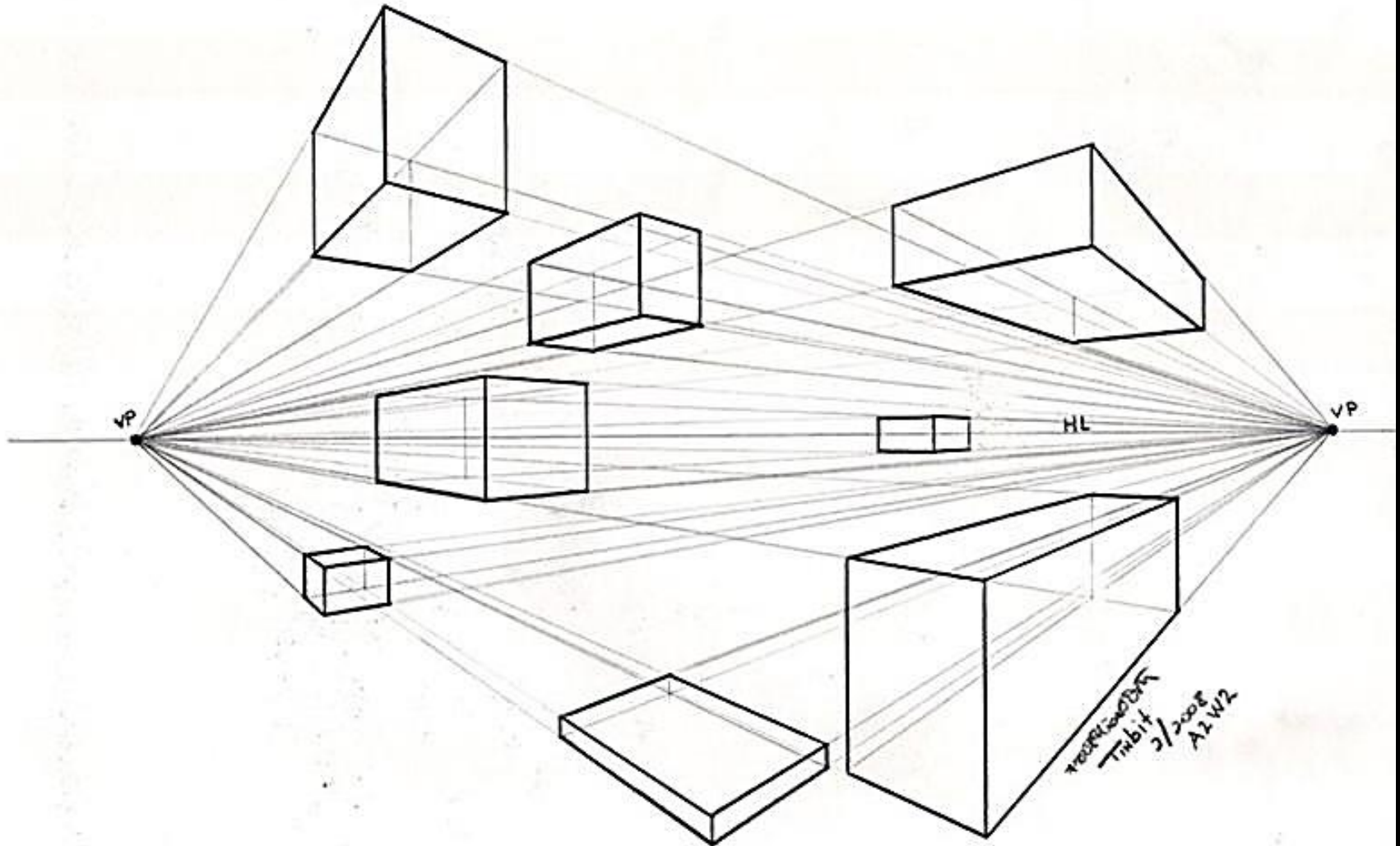


Use of one-point perspective:
Masaccio, *Trinity*, c. 1425–6.
Fresco, 21'10½" x 10'4⅞".
Santa Maria Novella, Florence,
Italy

Two and Multi-Point Perspective

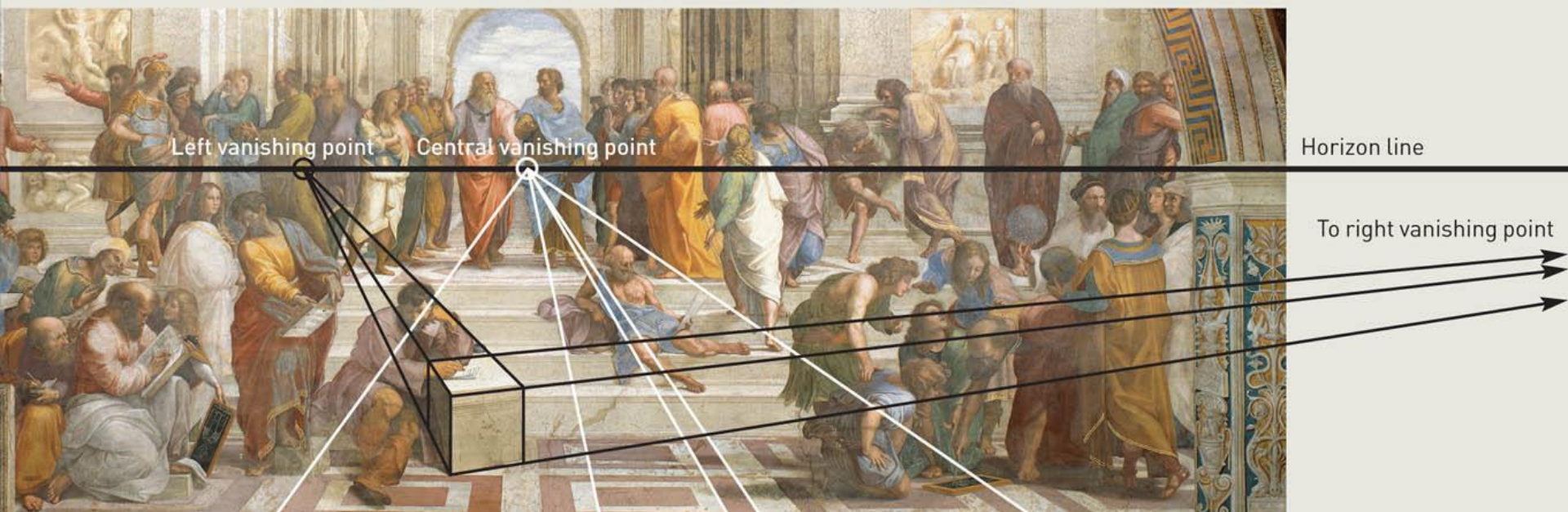
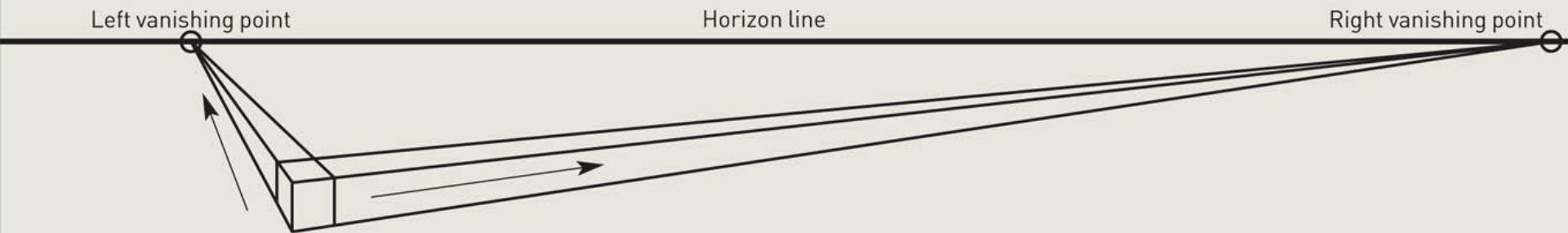
- Many objects are made up of multiple angles that need even more vanishing points
- The most common multiple-point perspective system is three-point perspective
 - ◆ A vanishing point is placed above or below the horizon line to accommodate a high or low angle of observation
 - ◆ Worm's-eye view: looking up
 - ◆ Bird's-eye view: looking down

Two Point schematic

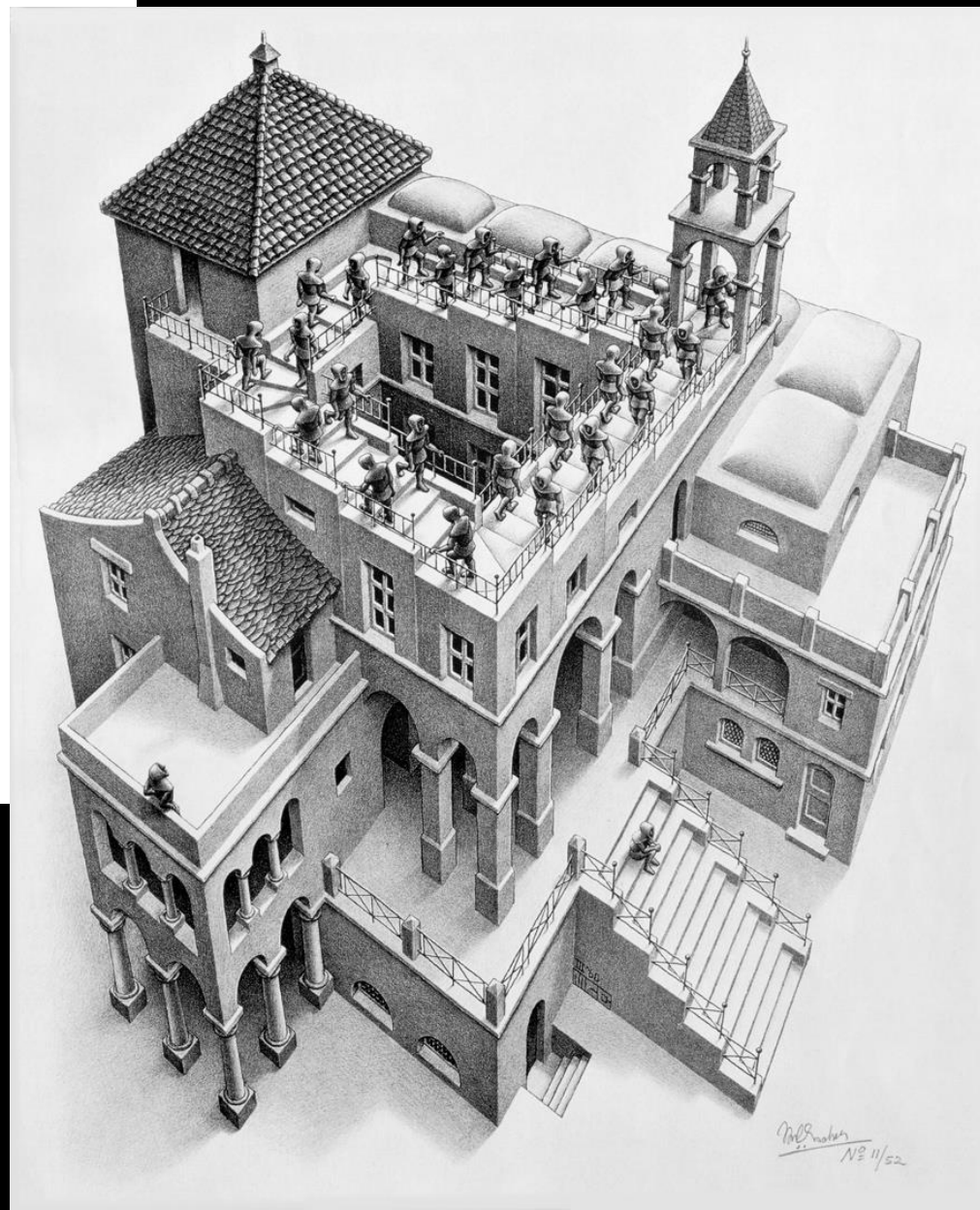
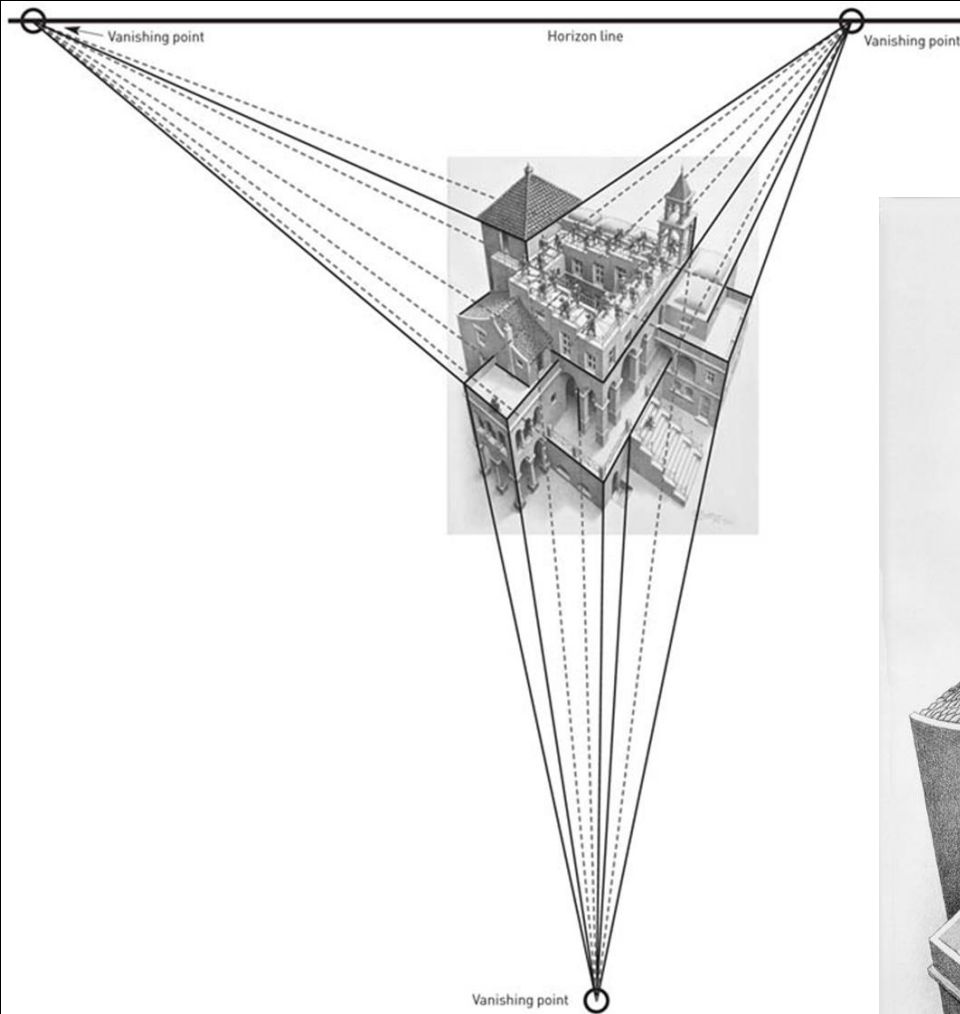




Raphael, *The School of Athens*, 1510–11. Fresco, 16'8" x 25'. Stanza della Segnatura, Vatican City



Applying two-point perspective: detail from Raphael, *The School of Athens*



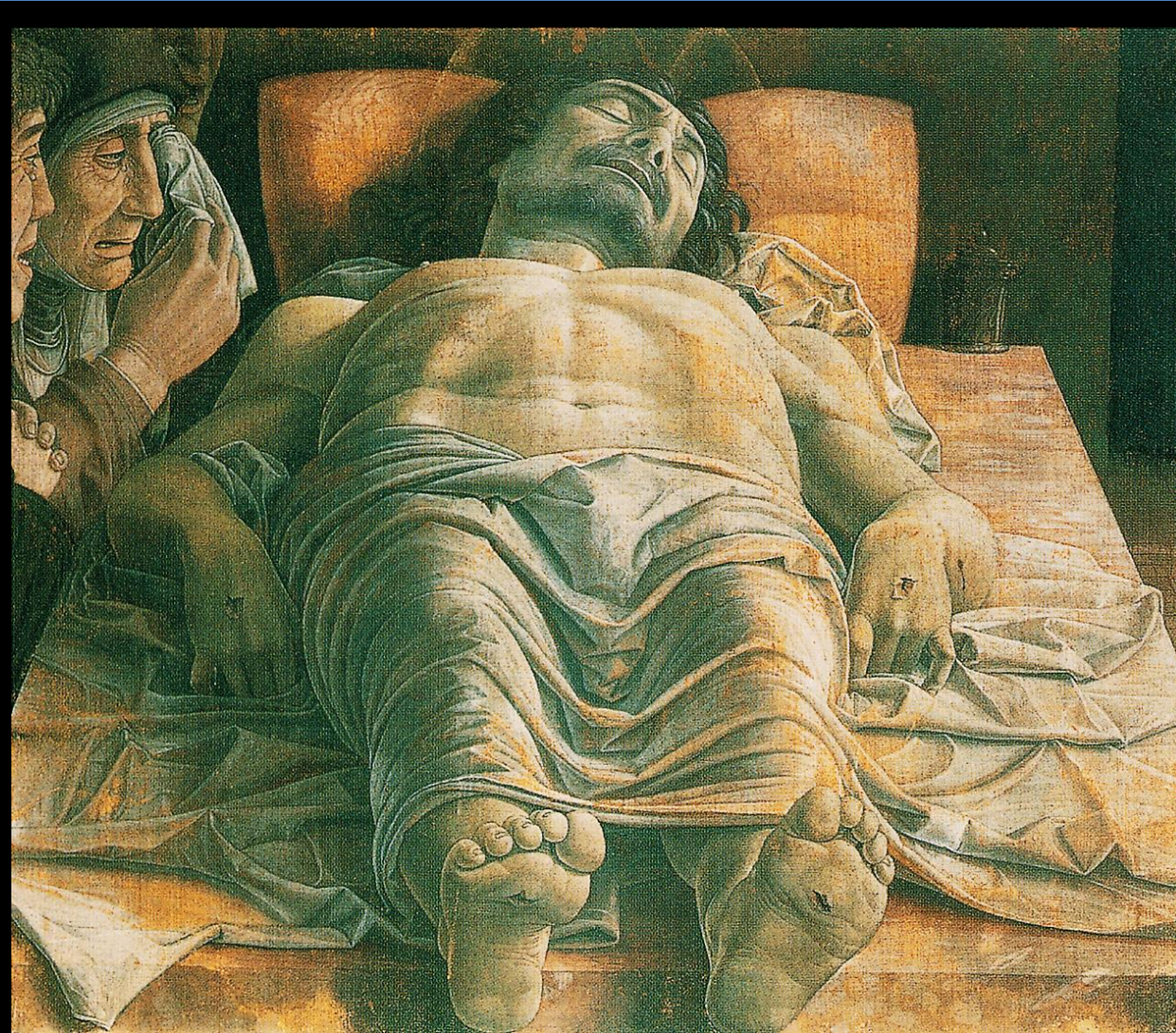
M. C. Escher, *Ascending and Descending*, March 1960.
Woodcut, 14 x 11¼". The M. C. Escher Company, Netherlands

Foreshortening



- Results when the rules of perspective are applied to represent unusual points of view

Examples of foreshortening seen often today



**Andrea Mantegna,
*The Lamentation
over the Dead
Christ* 1480**

The figure of Christ is oriented so that the wounded feet are placed in the extreme foreground

Conclusion

- Artists anticipate the effects of light on an object by subtle variations in value, color saturation and detail
- We see depth when an artist overlaps different shapes, or contrasts their sizes in a particular way
- From observation of the real world, the artist mimics variations in texture, brightness, color intensity, and atmospheric perspective to create an imaginary space
- Different systems of perspective allow artists to create a new and convincing sense of depth-**Or to challenge it!**