

## Images from Lecture Three on Linear Perspective

Math in Art, Summer 2015

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### Natural Perspective

The Cone of Vision (from Euclid's Optics)

Head Crushing: <http://www.youtube.com/watch?v=8t4pmlHRokg>

*Jesus Before the Caif*, Giotto, 1305

*Space in Medieval Painting and the Forerunners of Perspective*, by Miriam Bunim

Bigallo Fresco, Anonymous, 14<sup>th</sup> Century

Map with a Chain, woodcut of the city from 1480

### Artificial Perspective

Brunelleschi's Experiment to show his design of a new set of doors for the Florence Baptistery

*Della Pittura*, Leon Batista Alberti, c. 1436

Alberti's Contruzione Legittima

Massacio, *The Holy Trinity with the Virgin and Saint John and Donors*, fresco, 1425-1427

Leonardo Da Vinci, *The Last Supper*, 1495-1498, Tempera on Gesso.

Leonardo Da Vinci, *Perspectival Study for Adoration of the Magi*, 1471

*Feast of Herod*, Bronze Relief Sculpture c. 1427

Lorenzo Ghiberti, Baptistery East Doors, the Doors of Paradise, 1425-52

Piero della Francesca's *Prospettiva Pingendi*

Piero della Francesca, *The Flagellation*, c. 1463-64

Albrecht Durer, *Treatise on Measurement*, 1525

Albrecht Durer, *Machines used to draw perspective*

### One Point Perspective

Edward Hopper, *Gas*, 1940, Oil on Canvas.

Edward Ruscha, *Standard Station*, Amarillo, Texas, 1963, Oil on Canvas

### Two Point Perspective

Edward Hopper, *House by the Railroad*, 1925

Curt Kaufman, *Untitled*, Prismacolor pencil on paper

### Three Point Perspective

Escher, *Tower of Babel*, Woodcut, 1928

### Multiple Point Perspective

George Tooker, *Subway*, 1950, Egg tempera on composition board

David Hockney, *The Brooklyn Bridge*, November 28, 1982, Photographic Collage

Sam Rohn, *Cloud Gate*, Chicago, 360 degree, 2006, Photograph.

Dick Termes, *Termespheres*: <https://www.youtube.com/watch?v=IhEBuqVlx0I>

### Isometric Perspective

Escher, *Cycle*, 1938

Q-Bert, 1982

David Hockney, *Self Portrait with Blue Guitar*, 1977, Oil on Canvas

Hermann Bollman, *Map of NYC*, 1963

### Techniques Used to Achieve Depth & Emphasize Perspective (Perspectival Clues)

Little Nemo in Slumberland, New York Herald Tribune, 20 May 1910

Ninja Cat: <http://www.youtube.com/watch?v=OcUROQL29H0>

Samuel Rosenberg, *Monday Morning After the Night Shift*, 1935, Oil on Canvas.

Ando Hiroshige, *Suido Bridge and Surugadai from One Hundred Famous Views of Edo*, 1857 Color Woodblock Print

Jacob Lawrence, *Cabinet Makers*, 1946, Gouache with pencil underdrawing on paper

Project for Franklin D. Roosevelt Memorial Park, Joseph D'Amelio, Architect

*No Passing*, Kay Sage, Collection of Whitney Museum, NY

Gustave Caillebotte, *Paris Street, a Rainy Day*, 1877, Oil on Canvas

## Playing with Perspective

### Entasis in Architecture

Durer's diagram showing change in size for lettering on a building

*Teatro Olimpico*, Andrea Palladio

Borromini's Colonnade, 1635, Rome, Palazzo Spada

Plate from Andrea Pozzo, Perspective, showing the simulated dome painted on part of the ceiling of church of Sant' Ignazio, Rome

Hans Holbein the Younger, *Ambassadors*, 1533

Anamorphic Treatises: Salmon de Caus 1612, Nicéron 1638, Dubreuil 1649, Schott 1674

Emmanuel Maigan, Anamorphic fresco, Saint Francis of Paola (1642), in the monastery of Santa Trinita dei Monti, Rome

Optical Construction of a cylindrical anamorphosis, Bettini, 1642

Cylinder and Cone Anamorphic images with mirror, Van Musschenbroek, Leyden, Netherlands, 1720

Matthew Carver, Detail of Sabine and her Doppelganger, 2010

Matthew Carver, Lonely Motel Anamorph, 2009, Acrylic on wood with garbage can

Matthew Carver, In the Studio, 2000, Acrylic on wood with fire extinguisher

Toronto Subway Anamorphic Art, Panya Clark Espinal

Sidewalk Art by Eduardo Rolero: <http://anamorfosiseduardo.blogspot.ca/>

Sidewalk Art by Julian Beever

Construction of Lego Army Anamorphosis:

[http://www.youtube.com/watch?v=lm3bUEePRMU&feature=player\\_embedded](http://www.youtube.com/watch?v=lm3bUEePRMU&feature=player_embedded)

Felice Varini, *Dix Sept Cercles Orange Excentriques*, 2010, Installation

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Felice Varini, *Corone e archi concentrici per l'angolo, arancioni*, 2004, installation.

Felice Varini, *Twenty Points for Ten Straight Crossing*, 2008, Installation.

The Ames Room: <http://www.youtube.com/watch?v=Ttd0YjXF0no>

## Against Linear Perspective

Piranesi, *Carceri*, 1749

*Horizontal Tree*, Piet Mondrian, 1911

Pablo Picasso, *Les Femmes d'Alger*, 1907

Duchamp's *Nude Descending a Staircase*, 1912

Paul Citroen, *Metropolis*, 1923

Giorgio di Chirico, *Mystery and Melancholy of a Street*, 1914

Rene Magritte, *The Blank Signature*, 1965, oil on canvas

M. C. Escher, *Other World*, 1947, Lithograph

### Impossible Objects

William Hogarth, *Perspective absurdities*, engraved frontispiece to John Joshua Kirby, Dr Brook Taylor's Method of perspective made easy in both theory and practice, 1754

M.C. Escher, *Waterfall*, 1961 Lithograph

Istvan Orosz, *Pergola*

Jos de Mey, *Stilleven met appels op een zeldzame tafel*, 1993

### Assignment Two Research

- ☐ Go talk to Liv Valmstead, the Reference librarian at the Art and Architecture library. (She will be away next Wednesday AM but otherwise she is there 8:30-4:30 Monday-Friday.)
- ☐ Look through the millions of images on Artstore (which can be found on the library's website).
- ☐ Peruse the books in the 5300 section in the basement of the Art and Architecture library.
- ☐ Peruse reference catalogues in the Quick Reference section of the library.
- ☐ If you're having trouble, focus in on Renaissance and Baroque artists.

### Additional Resources

Douglas Cooper's *Drawing and Perceiving: Real-World Drawing for Students of Architecture and Design*

J. V. Field's *The Invention of Infinity: Mathematics and Art in the Renaissance*

Martin Kemp's *The Science of Art*

Kubrick and One Point Perspective: <http://vimeo.com/48425421>