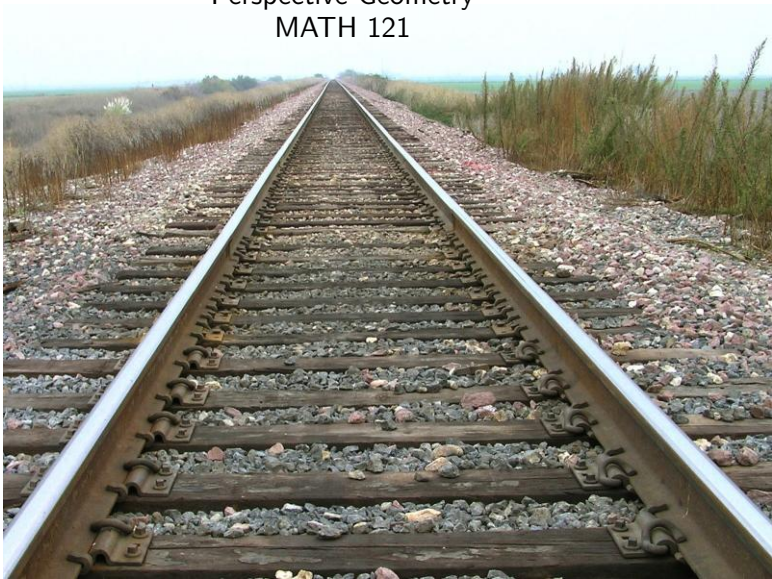


Perspective Geometry
MATH 121







Course Goals

- ▶ Understand why parallel lines appear to converge

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- ▶ Learn techniques for correct perspective drawings

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- ▶ Learn techniques for correct perspective drawings
- ▶ Understand why these techniques work
- ▶ Learn about the historical development of perspective
- ▶ Understand how these artistic ideas influenced mathematics



Frescoed wall of the shrine of Hathor from Deir el-Bahri
New Kingdom 1570-1070 BCE

Giotto di Bondone



Homage of a Simple Man

(detail) 1295–1300



Meeting at the Golden Gate

1304–1306

Giotto di Bondone



Homage of a Simple Man

(detail) 1295–1300



Meeting at the Golden Gate

1304–1306

Duccio di Buoninsegna



c. 1300

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Duccio di Buoninsegna, c. 1310



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Fra Angelico



Annunciation, c. 1450

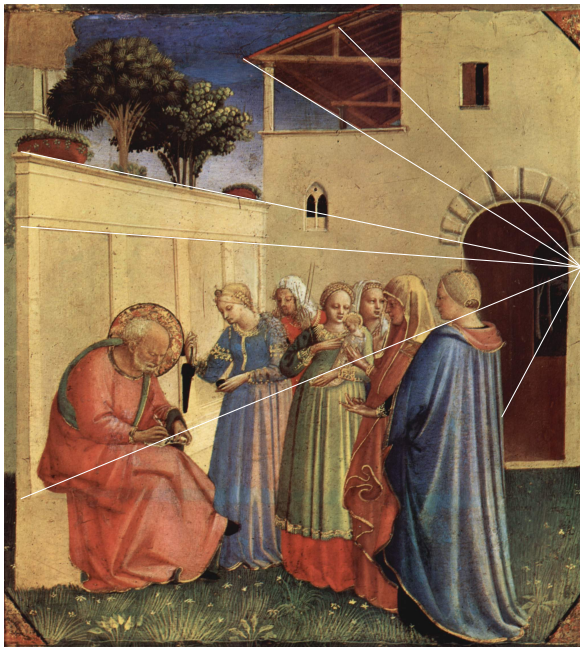
Fra Angelico



Annunciation, c. 1450

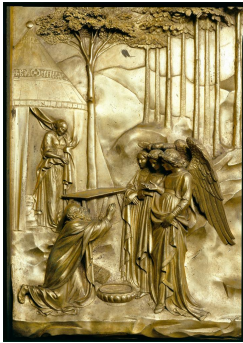


Fra Angelico c. 1450



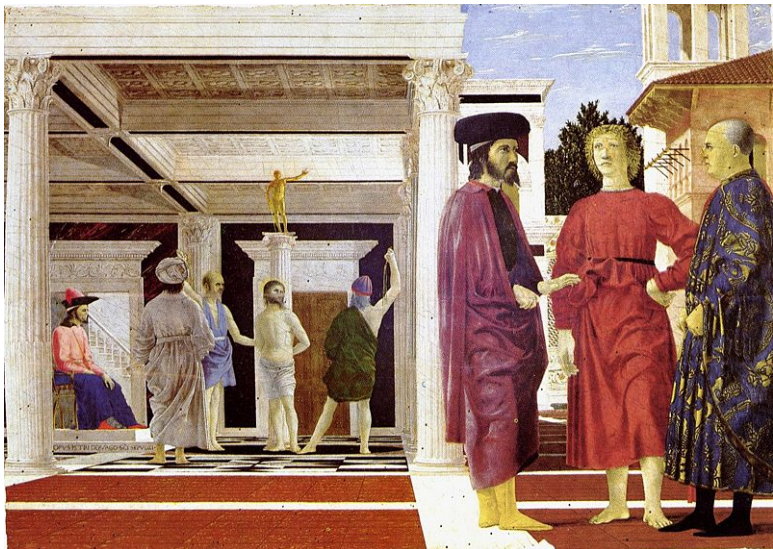
Fra Angelico c. 1450

Lorenzo Ghiberti



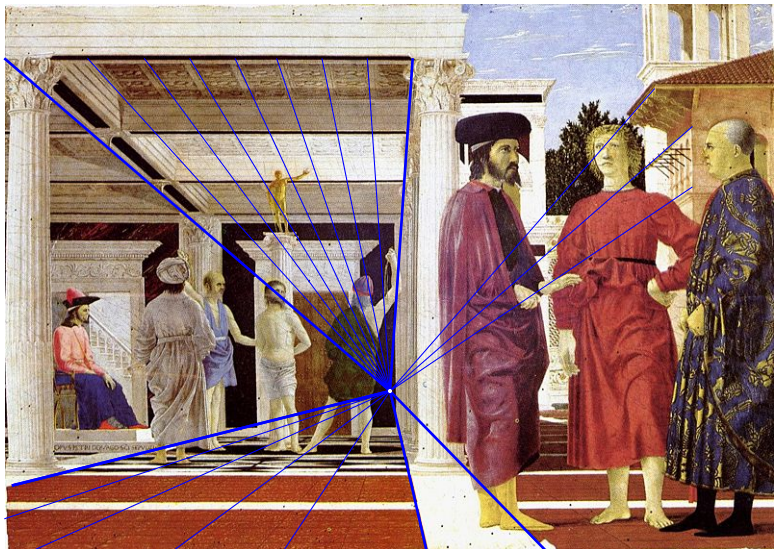
Doors of Florence Baptistery 1401–1422

Piero della Francesca

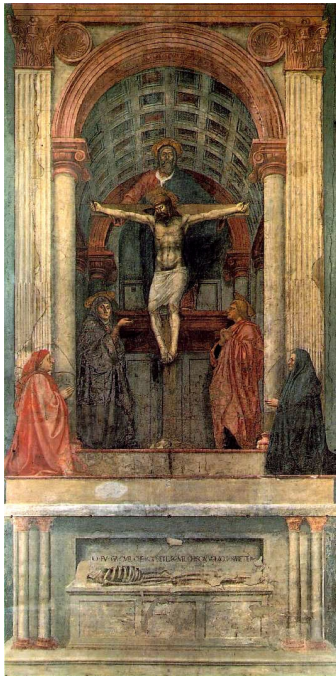


The Flagellation of Christ, 1460

Piero della Francesca



The Flagellation of Christ, 1460



Masaccio

(Tommaso Cassai)

1401–1428

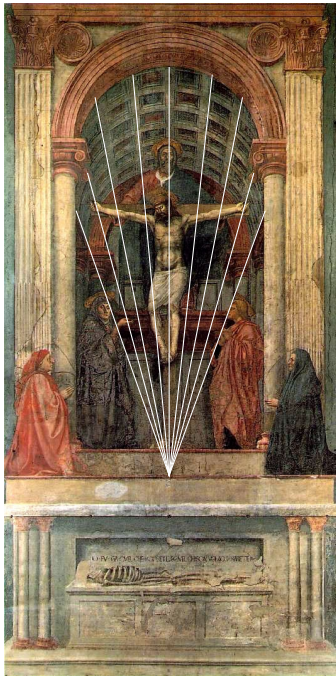
Masaccio

Trinity

Fresco, c. 1426

Santa Maria Novella

Florence



Masaccio

(Tommaso Cassai)

1401–1428

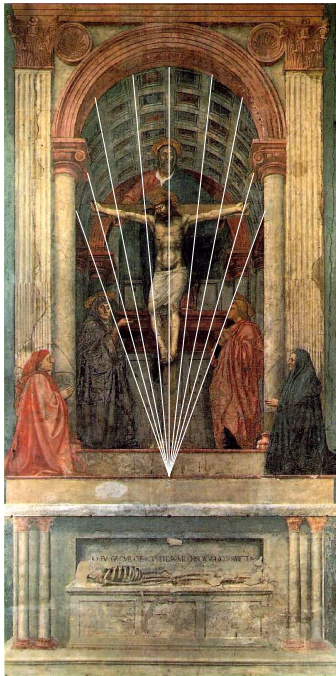
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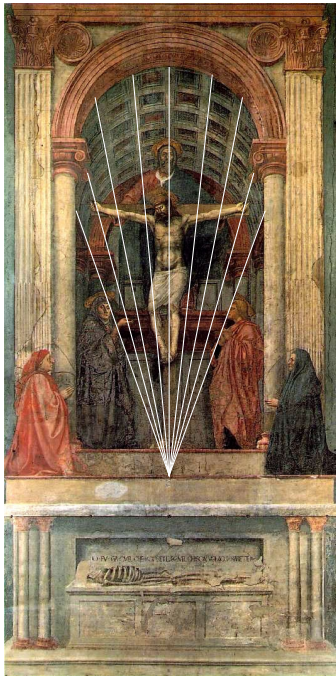
Masaccio

Expulsion
Fresco, c. 1426
Brancacci Chapel
Florence



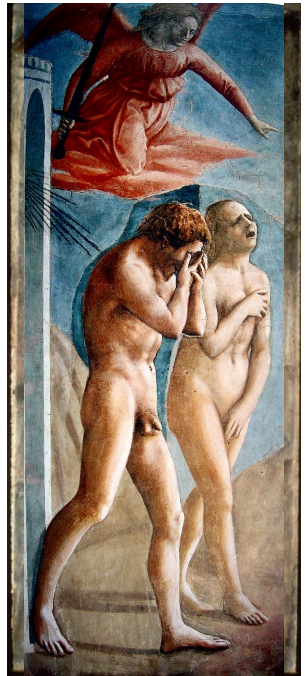
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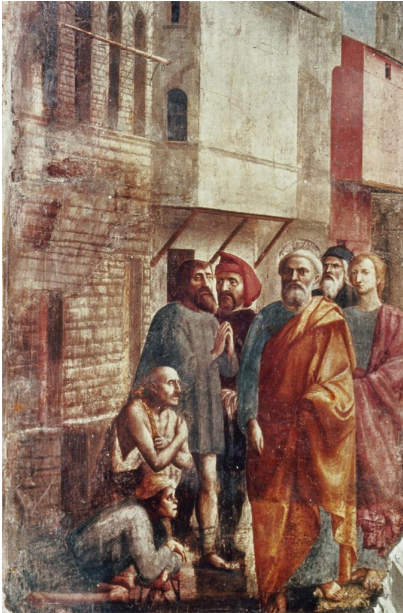
Masaccio

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Masaccio

Trinity
Fresco, c. 1426
Santa Maria Novella
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Masaccio

Saint Peter Healing the Sick with His Shadow

Fresco, c. 1427

Brancacci Chapel

Florence



Masaccio

The Tribute Money

Fresco, c. 1427

Brancacci Chapel

Florence



Masaccio

The Tribute Money

Fresco, c. 1427

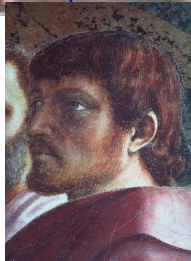
Brancacci Chapel

Florence



Masaccio

The Tribute Money
Fresco, c. 1427
Brancacci Chapel
Florence



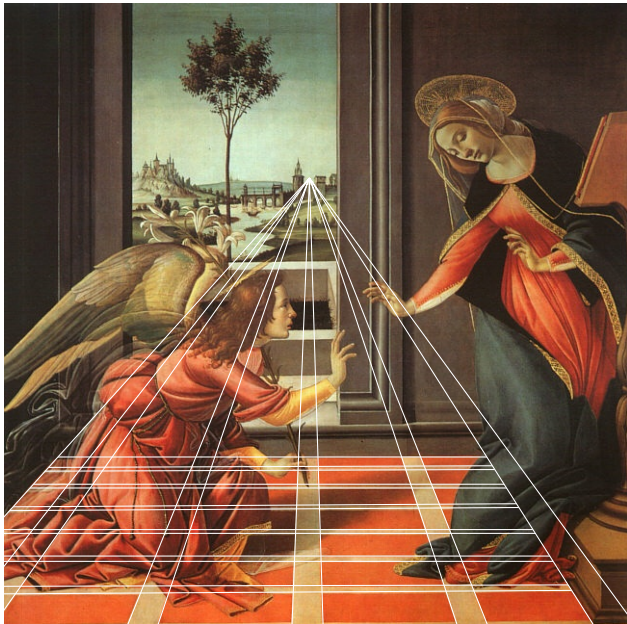
Self portrait



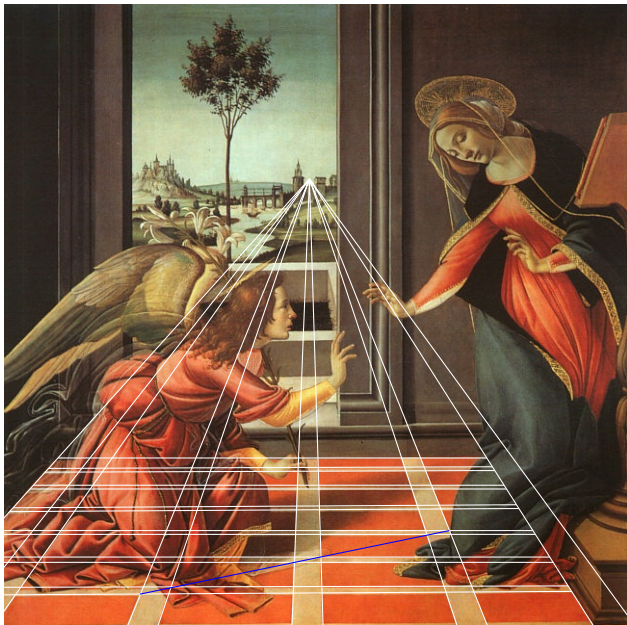
Sandro Botticelli, *Annunciation*, c. 1490



Sandro Botticelli, *Annunciation*, c. 1490



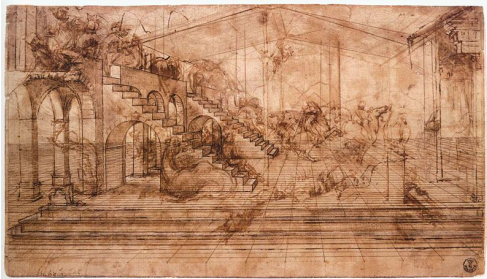
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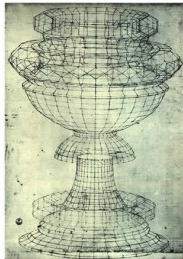
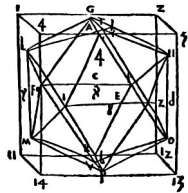
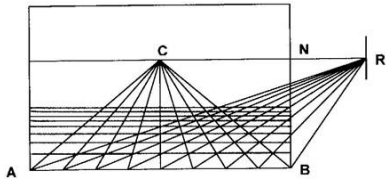
Leonardo da Vinci

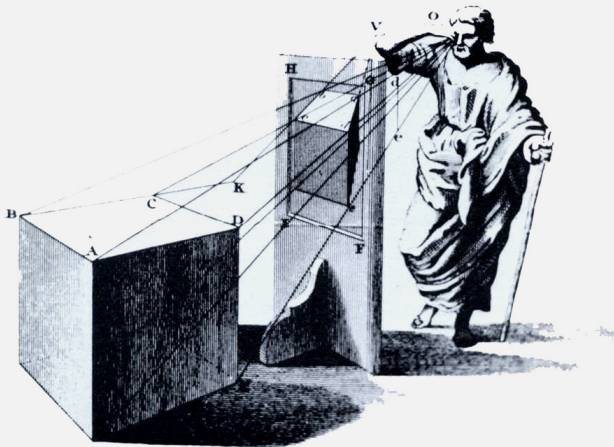


Study for *The Adoration of the Magi*



The Adoration of the Magi, c. 1481





The visual cone, from B. Taylor, *New Principles of Linear Perspective* (1715).



Albrecht Dürer, c. 1525