**In the Renaissance Filippo Brunelleschi Discovered Perspective**

“Perspective is nothing else than the seeing of an object through a sheet of glass, on the surface of which may be marked all the things that are behind the glass.”

-- Leonardo

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**The First Perspective Image**

Masaccio’s fresco “Trinity” (c. 1427)

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**Italian Art in the Late Middle Ages Before the Discovery of Perspective**

- di Bartolo, “The Nativity of the Virgin” (c. 1400)
- di Giovanni Fei, “The Presentation of the Virgin” (c. 1400)

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**Perspective in Art**

- Giotto, 1300 (before perspective)
- Campin, 1430 (after perspective)
Perspective in Art

Jan Vermeer, "The Music Lesson" (c. 1664)

Pinhole Camera

image coordinates

Pinhole Camera

scene

image plane

optical center

Alberti’s Grid
Suggesting a Moving Camera

A *multiperspective image* incorporates many perspectives into a single, locally-coherent image.

A *moving window* slides across the panorama, selecting frames for creating an animation.

Extracted frames from Disney’s film *Pinocchio*, 1940.
van Eyck’s “Ghent Alterpiece” (1432)

Hockney’s “Pearblossum Highway” (1986)

Fisheye Lens Image
Not a single optical center