ANDREA PALLADIO

Palladio was a stone mason

Palladio Designed over 30 villas throughout the Veneto only 19 were built 1535 - 1570

Drawings in the Four Books were written after the buildings were constructed

The first book contained the rules

Second Book contained drawings of the villas
Reference Marks for section cuts

Scale Notation

Varying Line weights

Plan

Elevation

Section

Details
Wall or Column notations
Dimension Note
Materials Notification
LINES AND VECTORS

CAD SYSTEMS

Lines

Coordinate Systems

Transformations

Operations
POINTS, LINES AND MANIPULATION

Geometric Entities

Lines are based on the Coordinates not the scale
POINTS, LINES AND MANIPULATION

((x₀, y₀) ─ k ─ (x₁, y₂₀₀₀))

(k = ?')
COORDINATE SYSTEMS

Grid System

Lines Can Snap to Modules

Lines Can Snap to Orthogonal Axes

Lines Can Snap to Objects
COORDINATE SYSTEMS

Points on Lines

Nearest  Endpoint  Midpoint
COORDINATE SYSTEMS

Points on Lines

Equal Divisions

Intersections

Perpendicular
COORDINATE SYSTEMS

Points on Lines

Center Point  Quadrant  Tangent (to last point)
LINE TYPES

- Straight
- Arcs
- Splines
LINE SEGMENTS

Three Segment

Nine Segments
LINE OPERATIONS

Break Operation
Extend Operation
Trim Operation
GEOMETRIC CONSTRUCTS

Offsets

Parallel

a

Offsets

4.500 – MIT
Prof. Larry Sass
TRANSFORMATIONS

- **Move**: Moving an object from one location to another without any rotation.
- **Rotate**: Rotating an object around a specific point.
- **Scale**: Changing the size of an object along one or more axes.
- **Mirror**: Reflecting an object across a plane.
PRE-DEFINED OBJECTS

Doors

Bathroom

Furniture

Chairs & Tables

Office Furniture