ONE-POINT PERSPECTIVE

- Lines into distance converge at a **VANISHING POINT** ("F" in the image below) on the **HORIZON LINE**
  - Moving this point from side to side along the horizon line changes the viewer's lateral position within the drawing

- Horizontal and Vertical lines are parallel to the edges of the paper
  - **FORESHORTENING** means things closer to you seem bigger, so sequences of horizontal or vertical lines get further apart as they get closer
  - Use **diagonal lines** to help you with the spacing

Image from: [http://kaplanpicturemaker.com/perspective/architecture](http://kaplanpicturemaker.com/perspective/architecture)

Watch **VIDEO by others**: [https://www.youtube.com/watch?v=SgP9QsOBogK](https://www.youtube.com/watch?v=SgP9QsOBogK)

The vanishing point is ALWAYS on the horizon line.

Image from: [vanished internet source found by JT Wunderlich PhD](http://kaplanpicturemaker.com/perspective/architecture)
Acropolis 9x11"
ONE-POINT EXTERIOR PERSPECTIVES
by JJ Wunderlich IV
2019 Portfolio
ONE-POINT EXTERIOR PERSPECTIVE
by JJ Wunderlich IV
2019 Portfolio

ONE-POINT INTERIOR PERSPECTIVE
by JJ Wunderlich IV – Dorm Room (2020)
Tutoring 20 Freshman FY1100 Conceptual Architecture students
Watch JJWIV VIDEO #1: (MP4, YouTube)
ONE-POINT OVERHEAD INTERIOR PERSPECTIVE
by JT Wunderlich PhD -- Dorm Room Design (1981, as a student)
with Japanese-style translucent privacy-screen divider and a shared
fish tank, and shared dresser drawers

ONE-POINT OVERHEAD INTERIOR PERSPECTIVE
by JJ Wunderlich IV – Dorm Room (2020)
Tutoring 20 Freshman FYS100 Conceptual Architecture students
Watch JJWIV VIDEO #1(continued): (MP4, YouTube)
ONE-POINT OVERHEAD EXTERIOR PERSPECTIVE
by JJ Wunderlich IV
2019 Portfolio
ONE-POINT INTERIOR PERSPECTIVE
by JJ Wunderlich IV (2020)
Tutoring 20 Freshman FYS100 Conceptual Architecture students
ONE-POINT INTERIOR PERSPECTIVE
by JJ Wunderlich IV (2020)
Tutoring 20 Freshman FYS100 Conceptual Architecture students
Watch JJWIV VIDEO #2: (MP4, YouTube)

ONE-POINT EXTERIOR PERSPECTIVE
by JJ Wunderlich IV -- Japanese Town (2020)
Tutoring 20 Freshman FYS100 Conceptual Architecture students
TWO-POINT PERSPECTIVE

- Vertical lines are parallel to the edges of the paper
- Horizontal lines converge to two vanishing points on horizon line

**FORESHORTENING** means things closer to you seem bigger, so sequences of horizontal or vertical lines get further apart as they get closer.

- Use **diagonal lines** to help with things like finding the centers of windows, or the location of roof peaks on gables

**HORIZON LINE**

This line will be higher in the drawing if the viewer’s eyes are higher above the ground.


Images from: [http://www.craftsy.com/blog/2013/06/2-point-perspective/](http://www.craftsy.com/blog/2013/06/2-point-perspective/)
TWO-POINT PERSPECTIVE
by JT Wunderlich PhD -- Arts Interest House (1981, as a student)
Common area (left) with Dorms (right)
TWO-POINT PERSPECTIVE (lower drawing)
THREE-POINT PERSPECTIVE (upper drawing)
by JJ Wunderlich IV – Venice, and view of a random city (2020)
Tutoring 20 Freshman FY4100 Conceptual Architecture students

TWO-POINT PERSPECTIVE
by JJ Wunderlich IV (2019)
Tutoring EGR/ART499 Architecture Studio and ART371 Architecture Theory students
TWO-POINT PERSPECTIVE
by JJ Wunderlich IV – Campus Dormitory Building (2020)
Tutoring 20 Freshman FYs100 Conceptual Architecture students
Watch JJWIV VIDEO #3: (MP4, YouTube)
TWO-POINT PERSPECTIVE
by JJ Wunderlich – Campus Dormitory Building (2020)
Tutoring 20 Freshman FYS100 Conceptual Architecture students
Watch JJW VIDEO #4: (MP4, YouTube)
THREE-POINT PERSPECTIVE

(Vertical lines converge to a \textit{vanishing point below or above})

- Horizontal lines converge to two vanishing points on horizon line

Image from: http://www.craftsy.com/blog/2013/08/three-point-perspective/

Image from: http://pixshark.com/3-point-perspective-interior.htm

Image from: http://moorestuff.us/ART_STUFF/chalkboard/12_lp-ex3.htm
THREE-POINT PERSPECTIVE
by JJ Wunderlich IV -- Arial view of a city (2020)
Tutoring 20 Freshman FY100 Conceptual Architecture students
MULTI-POINT PERSPECTIVE
by JJ Wunderlich IV
2019 Portfolio

Rendering by Dutch Renaissance Artist Hans Vredeman de Vries, 1604.

https://www.quora.com/Perspective-in-a-cityscape-can-buildings-obey-different-sets-of-vanishing-points
what type of perspective should you choose

1-point perspective

2-point perspective

3-point perspective

Multi-point perspective

4-point perspective

5-point perspective

https://www.sketchlikeanarchitect.com/blog/what-type-of-perspective-should-you-choose
NOTES and FURTHER READING

1. The one, two, three, and multi point perspective techniques shown above are **LINEAR PERSPECTIVE** techniques; and the four and five point perspective techniques are **CURVILINEAR PERSPECTIVE** techniques.

2. Engineers often use **PARALLEL PROJECTION DRAWINGS** (e.g., Orthographic Projections) rather than perspective drawing so dimensions can be easy scaled off of the drawings (e.g., there is no “Foreshortening”). Simpler Computer Games may also use these techniques.

3. Perspective drawing is an approximation of human vision, and is what is attempted in the Computer Graphics of sophisticated Architectural Rendering software (like in Etown REVIT student projects), and in modern Computer Game software (like in Etown Lumion student projects). Read (and listen to) more (using PPTX-w/audio for clickable links where available) JTW_PhD Lectures:
   - “Human vs. Machine Vision” PPTX-w/Audio MP4 YouTube PDF
   - “Intro to Neural Networks (and Symbolic AI)” PPTX-w/Audio MP4 YouTube PDF
   - “Intro Neural Network Code” MP4 YouTube
   - “Color, Display-Technologies” PPTX-w/Audio MP4 YouTube PDF
   - “Graphics Cards I” PPTX-w/Audio MP4 YouTube PDF
   - “Graphics Cards II” PPTX-w/Audio MP4 YouTube PDF

Listen to 2020 “2020 Christmas Concert” JJWIV VIDEO #7: (MP4 YouTube)