DREXEL UNIVERSITY / Department of Architecture + Interiors / Arch 155.2009-2010

Course Number and Title: ARCH 155 / Basic Architectural Drawing
Instructor: Paul Schultz 215-531-2861 pschultz@resul-tech.com

WEEK 4:
Review Assignment 3, Visual Architecture Dictionary
Presentation on One-Point Perspective Drawing and use of a one-point perspective grid
Site visit to 30th Street Station to begin assignment

ASSIGNMENT 4: ONE-POINT PERSPECTIVE
As architects we must be able to convey three-dimensional forms on two-dimensional drawing surfaces. To do this in a convincing manner, we employ drawing systems such as one-point perspective to describe spaces. This week's assignment will focus on developing your skills of observation and translation of three-dimensional information onto the two-dimensional drawing surface, as well as your freehand sketching ability.

Visit 30th Street Station to complete 2 one-point perspectives in your sketchbook of the interior space of the Main Concourse using the drawing techniques discussed in class.

Both perspectives should be drawn in pencil first, followed by ink.

- Begin by setting up a one-point perspective grid *drawn lightly* with construction lines in pencil.
- Continue to use pencil to fill in known information – this should be done with a light lineweight.
- Only trace over the drawing elements in ink after the drawing is complete.
- Select 3 pen-tip thicknesses from the Micron pen set to create a range of line weights in your perspective drawing: largest tip for primary / foreground elements, the medium tip for secondary elements the thinnest tip for details.
- Familiarize yourself with the terminology: vanishing point, horizon line, measuring line, picture plane

The construction lineweight perspective grid may be done with the aid of a straightedge but the remainder of the drawing (in pencil and ink) should be done freehand. Practice drawing straight lines slowly to maintain accurate lines and consistent lineweights.

Draw from 2 different vantage points. A central point in the room facing east or west and a point against the north or south wall will each tell a different story about the space. Use additional pages in your sketchbook to test out a few scenarios before committing to the final 2 perspective drawings. *Be certain that you are drawing what you see and maintaining the proper horizon line height in both drawings.*

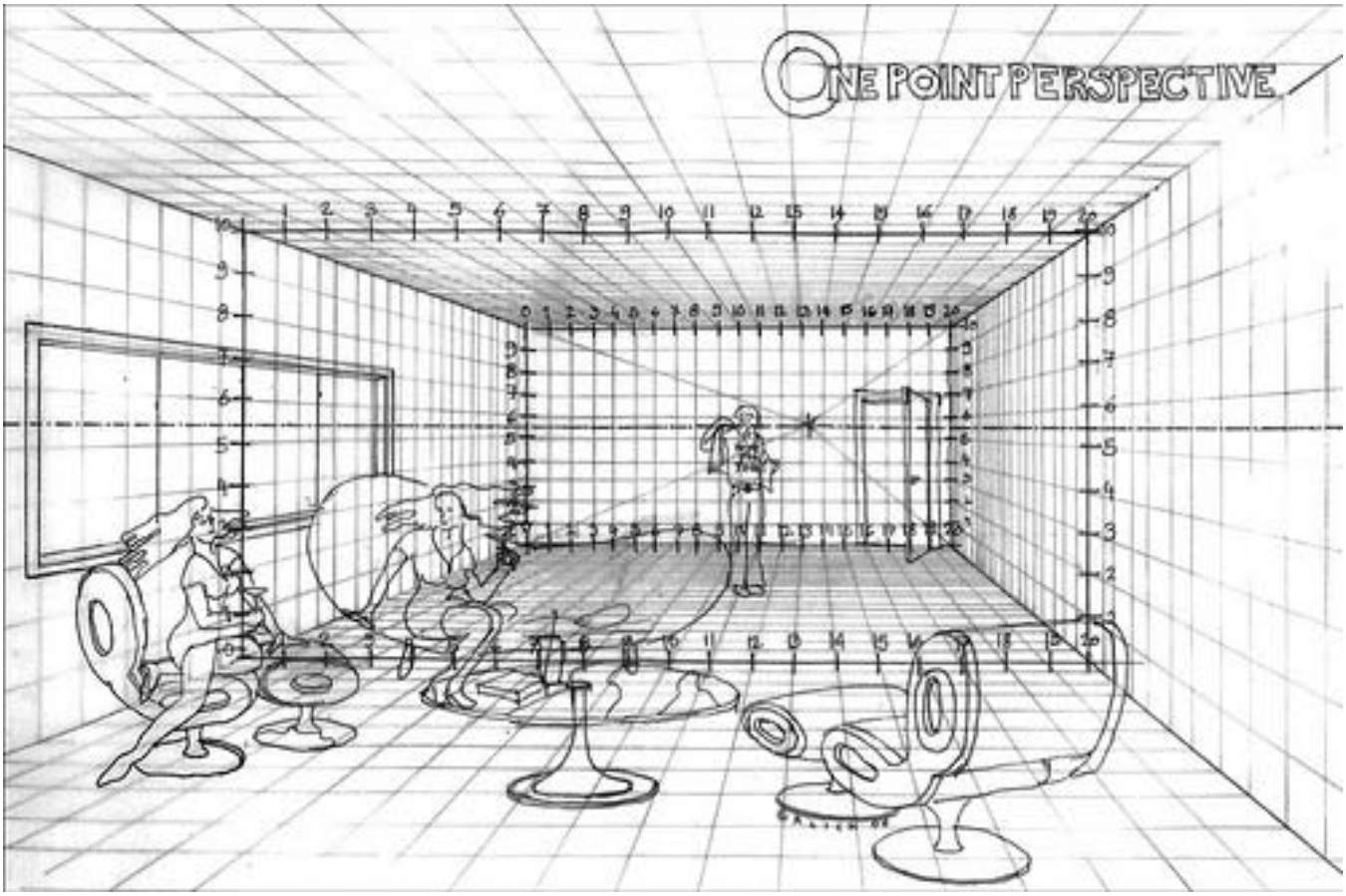
Use perspective drawing techniques to add detail to your drawings. Include elements such as light fixtures, window panes, and ceiling details to convey the various aspects of the Main Concourse. Count ceiling or floor tiles and divisions in wall surfaces to accurately place objects in space.

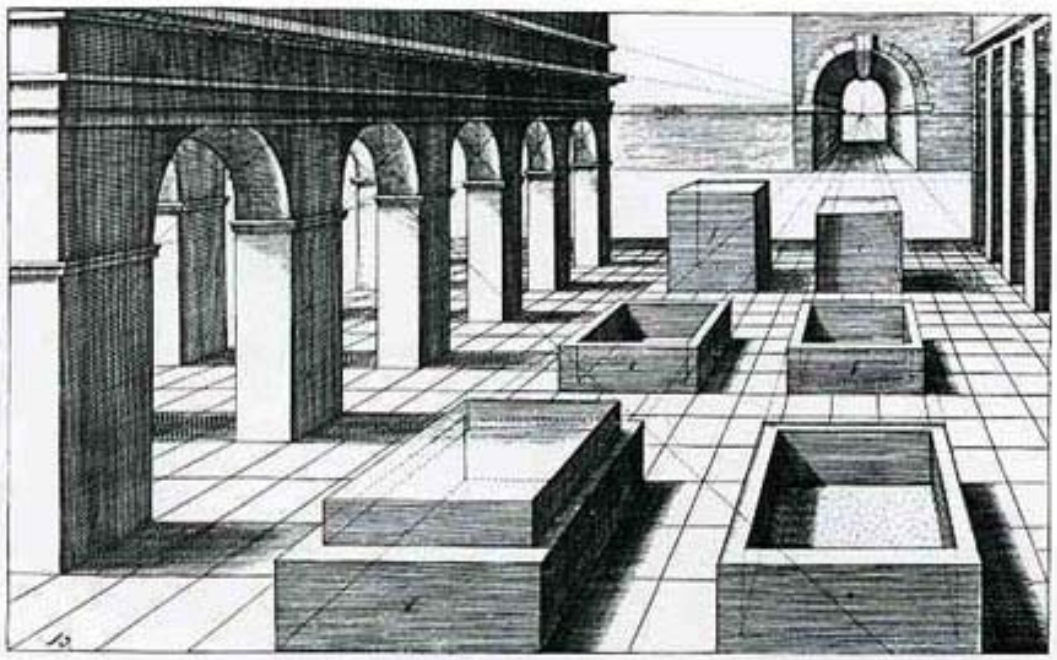
Keep in mind these principles of one-point perspective:

- Perspective drawing allows us to place three-dimensional objects in two-dimensional pictorial space; Illustrate how the forms diminish in size as they recede; Depict a specific vantage point
- In one-point perspective, one wall within your drawing must be parallel to the 'picture plane'
- In one-point perspective, all horizontal lines which are parallel to one another but perpendicular to the picture plane converge to a single vanishing point.
- All vertical lines remain vertical in the perspective drawing.
- Equal and repetitive spaces or objects can be drawn using the Method of Diagonals (see Design Drawing / Perspective Measurements: Subdividing Depth).
- Use a Measuring Line to gauge relative heights and proportionate objects (see Design Drawing / Perspective Measurements: Measuring Height and Width).
- Use visual cues such as *proportional, axial, and modular relationships* to translate the information into a sketch.

Assignment due: 10-20-08 (Tuesday section) 10-22-09 (Thursday section);

two one-point perspective views of the interior of the Reconstructed Stoa of Attalos, 159-132 BC (presently the Ancient Agora Museum) in Athens, Greece.





3.60 Jan Vredeman de Vries, *Perspective Study,* from *Perspective,* Leiden, 1604.