PERSPECTIVE DRAWING

INTRODUCTION . . . History of Perspective

Perspective in the art of drawing and painting, and in some relief sculpture, is a technique that allows us to represent three-dimensional objects and space on a flat surface or plane. This surface or plane is the board, paper, canvas, or surface onto which we draw or paint our impression and view of an object or scene.

In art, there are a number of ways to use perspective thinking and logic in order to obtain the illusion of depth — some with the use of color and graduated values of black and white, and some with accurate drawing of the subject by applying the rules of the geometric system of perspective.

LINEAR PERSPECTIVE as we know it today is thought to have evolved from the early architectural drawings of two architects, Brunelleschi and Alberti, in Florence, Italy in early 1400 A.D. Filippo Brunelleschi drew two panels that were pictorial views of Florence in perspective. These panels made an important impact on art theory in the areas of architecture and fine art. Unfortunately, the two original panels are lost. Leone Battista Alberti was a painter, musician and architect in Florence, Italy. He designed some of the most classical buildings of the 15th century. He wrote the very first book on painting that covered both theory and technique, and it had a great influence on the Renaissance artists. His writing covered subjects such as imitation of nature, beauty, perspective and ancient art. An interesting side note is that in 1464, Alberti wrote another work on the subject of sculpture. This writing was another first work in the field and covered human proportions.

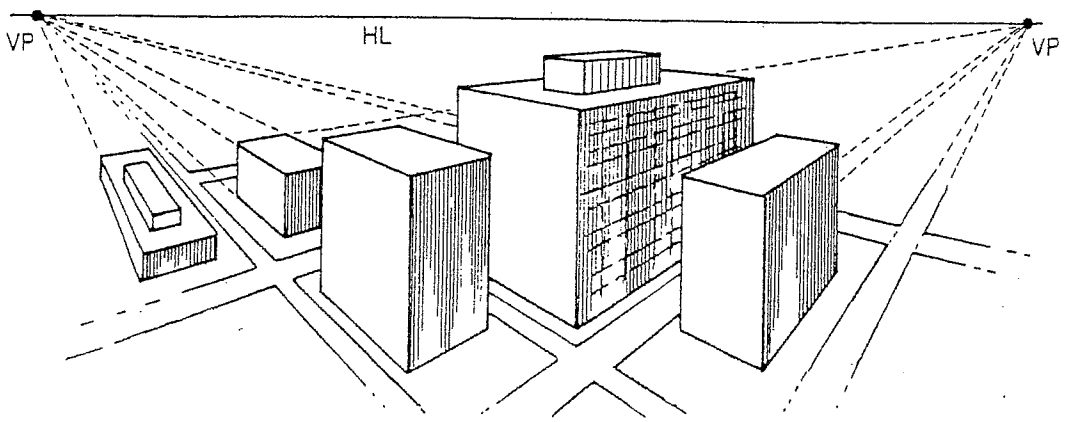
In his book *De pittura*, Alberti combined the rules and techniques of perspective with the theory that painting is an imitation of reality. He saw the picture plane as a window through which the artist sees the visible three-dimensional world. Objects appeared smaller as they receded into the distance, and objects of uniform distance from one another, such as fence posts, appeared to become closer together the farther they receded into the distance. Projected imaginary lines that were parallel to the surface plane converged to one point at the horizon. All of the objects in the picture related to the same horizon when viewed from the same viewing or station point. In this method, all objects could be measured in proper geometric proportion to one another.

The Italian artists of that day tended to work within this geometric system, while the Flemish artists relied upon their observations and practical experience to accomplish the illusion of depth and space. This is referred to as the empirical method of achieving depth.

Leonardo da Vinci is credited with the general development of the AERIAL or ATMOSPHERIC PERSPECTIVE. This method is based upon observations that contrasts of color and values of dark and light are much greater in objects that are close than in ones that are distant. Atmosphere and light affect the colors of objects in nature. A bluish white effect, created by atmosphere, is noticeable on all colors as they become more distant. Also, lines, edges and contours are more clearly defined in objects that are closer than those more distant. Aerial perspective also observes that distance affects the color of objects and that the same color appears cooler and lighter when placed more distant, and warmer and more intense when closer.

The use of linear perspective has had a great influence upon the development of art in the western cultures, but, in the art of today, it is being cast aside by many who feel that art is more an extended expression of themselves than a mirroring of nature and reality. In some cases, I view this as a lazy excuse to avoid the labor of learning to draw.

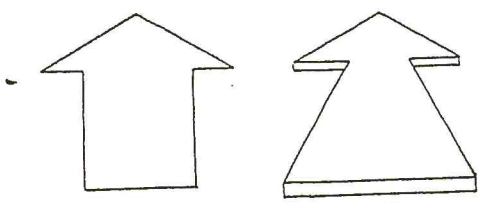
The knowledge of perspective is invaluable to the serious artist no matter what technique or school of art he or she may prefer. If we know and understand the basic theories of perspective, then we can produce our work in any degree of realism or thoughtful distortion.



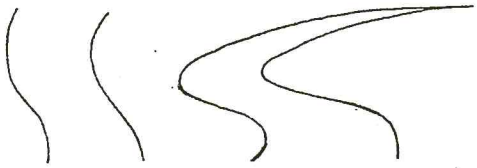
Perspective is a method of drawing and painting the illusion of depth onto a flat surface. In order to do this, we must make a number of observations.

The forms or objects that we are drawing onto that flat surface actually, in real life, have depth and dimension. As we view them and place their shapes and forms onto our drawing surface, we must always try to represent that depth so as to make the objects appear real and true. These forms must appear to extend deeply into the illusional space of our picture in order to create the only true magic in drawing and painting — the appearance of form, depth and the natural play of light — all on a flat surface.

In the examples, notice that one of the arrows and one of the roads appear to have depth while the others appear flat.



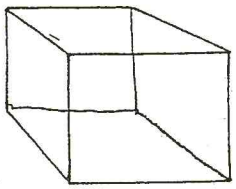
NO DEPTH DEPTH



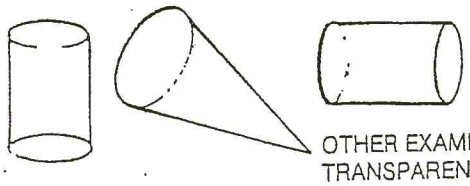
NO DEPTH DEPTH

The foundation of all good paintings and drawings, no matter how beautifully shaded and colored, is the correctness of perspective in the drawing of the form and the depth of the objects portrayed.

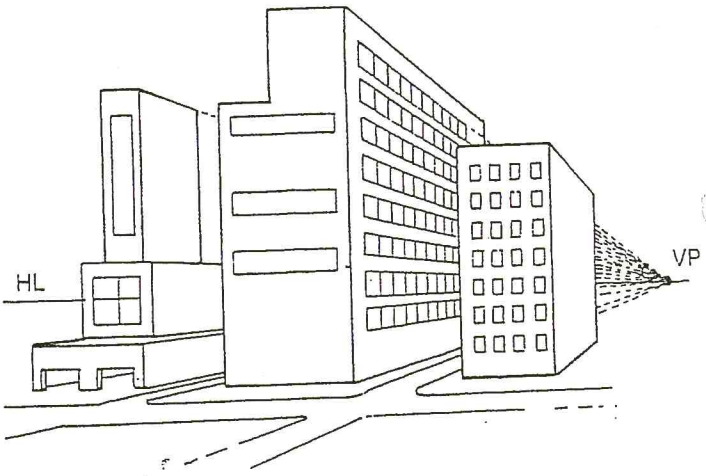
In order to make the task of obtaining depth and form easier, we should think about the whole object we are drawing. Do not just look at the front visible surface, but imagine the complete object as the planes of the sides recede. Objects that have depth and breadth have backs and other sides. In order to feel this, we must study the object and draw the feeling of the complete form. If we want to draw a box, we should sketch it as if it were transparent. By drawing this way, we not only understand the box better, but are more likely to draw it correctly in size and shape. We certainly will be able to portray the illusion of depth far easier this way than if we just concentrated on the *visible surface.*

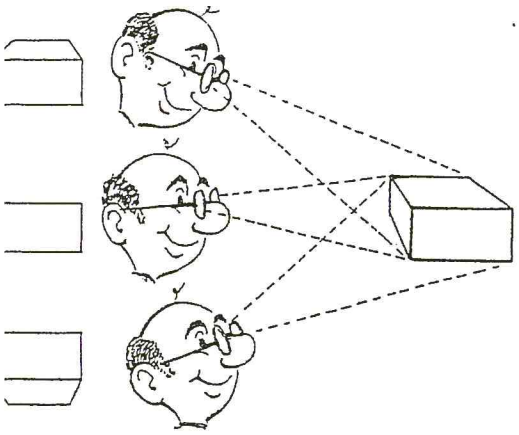


SKETCH SHOWING VISIBLE SURFACES & PLANES

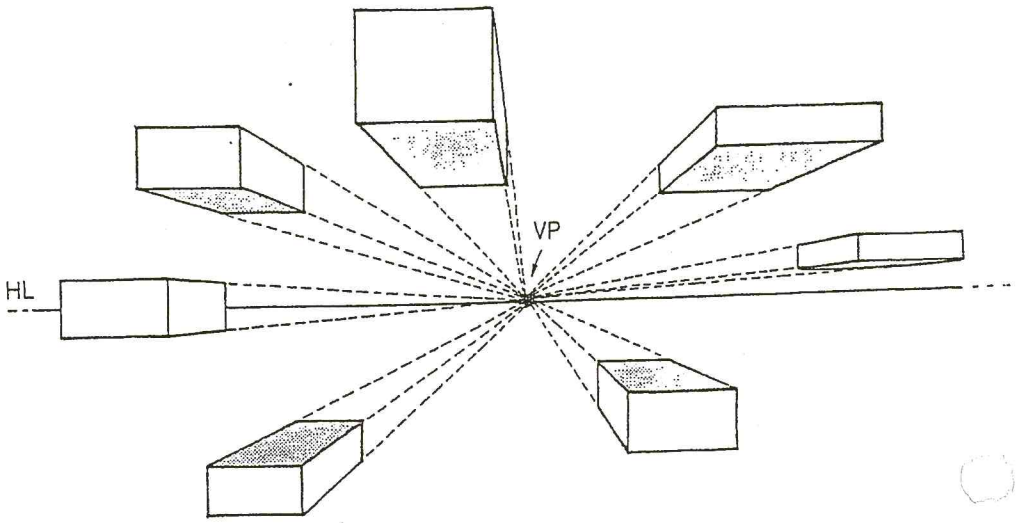


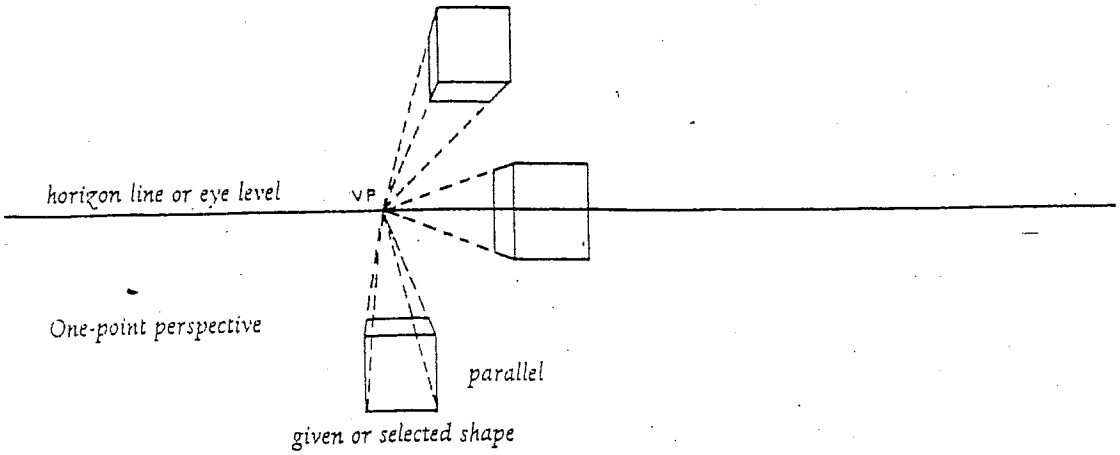
OTHER EXAMPLES OF DEPTH BY TRANSPARENT SKETCHING

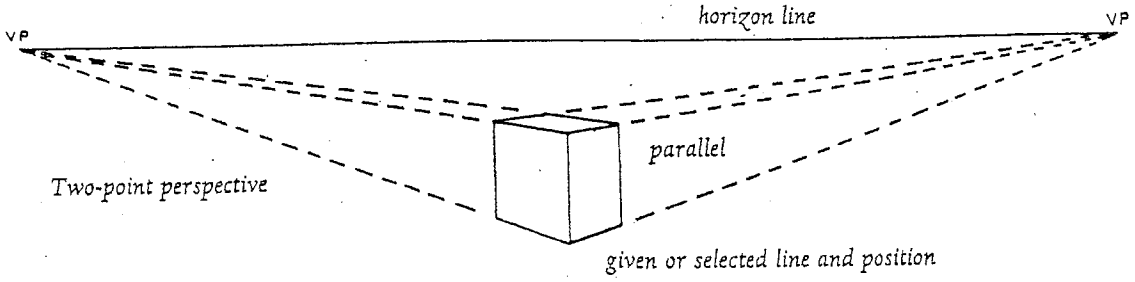


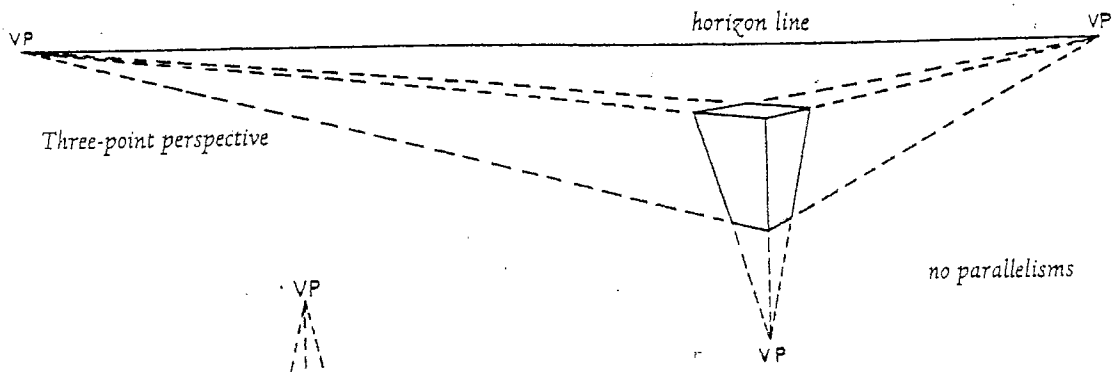


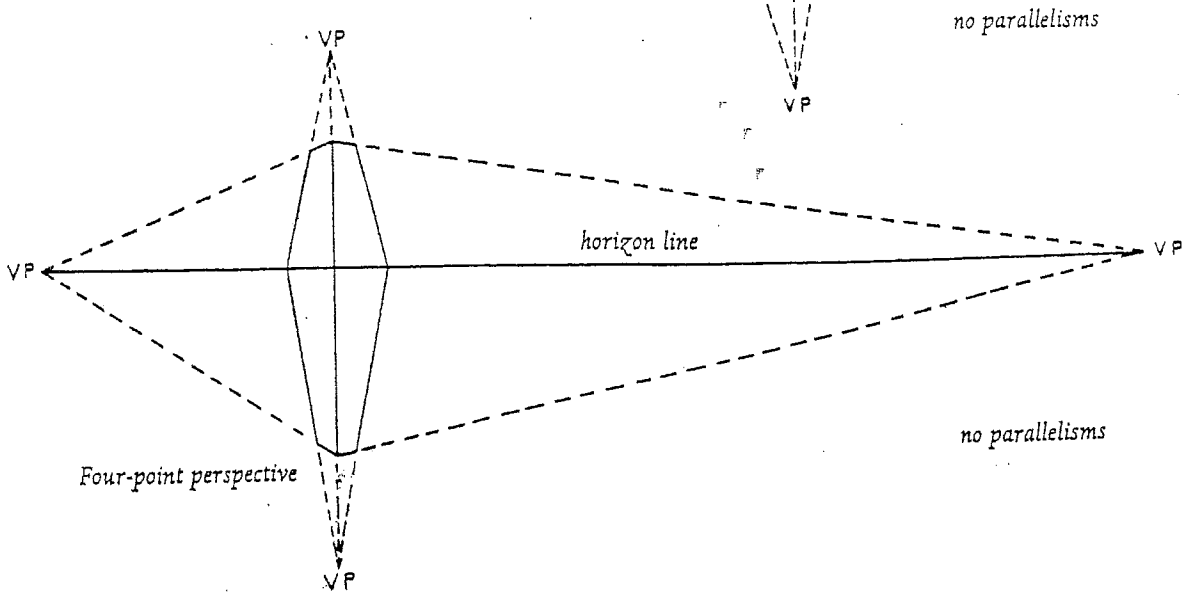
Objects appear very different when viewed from various positions. Because of this, we must establish our viewing point (the position from which we view the subject) and stick with it for the complete picture. When we observe our subject, we see depth and three dimensions. When we draw this subject onto our flat surface as it appears to the eye, we are then DRAWING IN PERSPECTIVE.




horizon line or eye level
VP
One-point perspective
parallel
given or selected shape


horizon line
VP
VP
parallel
Two-point perspective
given or selected line and position


horizon line
VP
VP
Three-point perspective
no parallelisms
VP


VP
horizon line
VP
VP
no parallelisms
Four-point perspective
VP

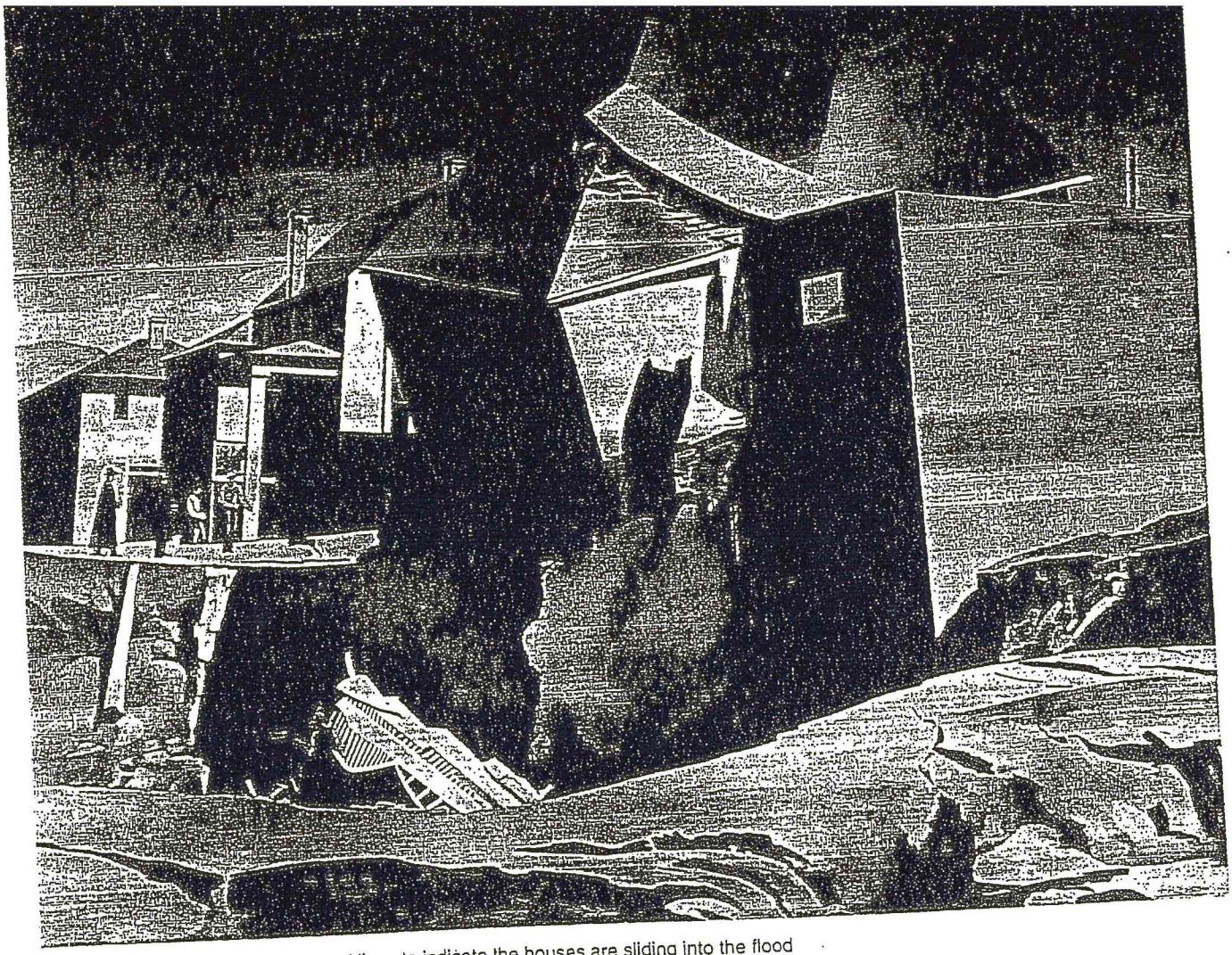


FIGURE 5.24 Sheeler uses diagonal lines to indicate the houses are sliding into the flood waters. Notice how the houses that have not been affected by the flood are still vertical.

Charles Sheeler. *Catastrophe No. 2*. 1944. Tempera on panel. 43.2 × 35.5 cm (17 ×14"). Wichita Art Museum. Wichita, Kansas. The Roland P. Murdock Collection.

OBJECTIVE: Create a two point upclose perspective cityscape that enhances the top, sides of the city. You will create a cityscape that allows the viewer to move in and out of the buildings like walking or driving down the street. Take into consideration the size/scale of the cityscape. Make the drawing as if the vanishing points were off the paper, giving you a large up close and personal view of a section of the buildings (like Hopper's, "Nighthawks", and Charles Sheeler, "Catastrophe No. 2"). Create very light lines when drawing so when you apply the ink the pencil lines will disappear. Add objects such as light poles, sidewalks, mailboxes, building textures, doorways and windows and any other detail that might enhance your cityscape. Once the drawing is complete, begin using the pen and ink techniques discussed in class. You will be given instruction on the use of the pen and ink and the proper use of the tool.

Medium: pen and ink
Size: 8 ½ x 11
Influence: Hopper, da Vinci