Assignment-06

What is a perspective grid? Explain in detail.

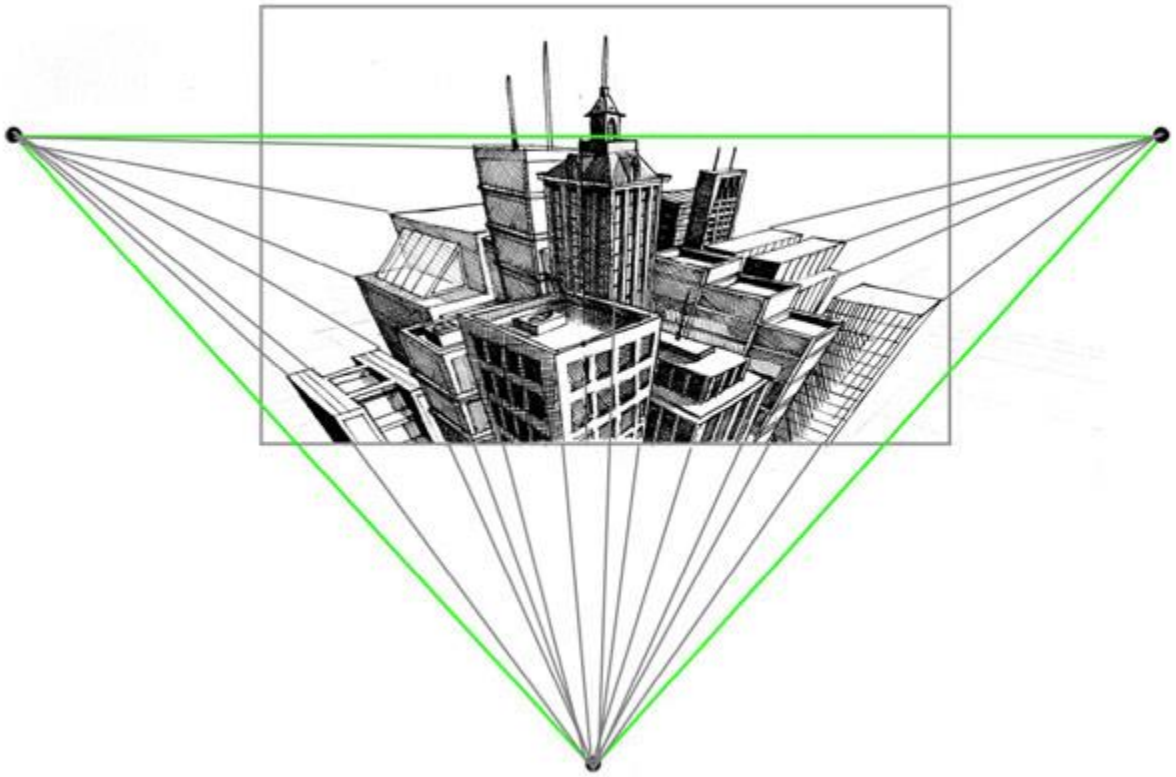
Perspective is a theory of drawing, which allows the artist a way to graphically depict three-dimensional objects on paper or other media, as they exist in space. The rules of perspective are many, but are based on the assumption that a single eye, from a fixed point of view, is looking at the subject being drawn. How each object is viewed in relation to other objects will determine a sense of depth, size relationship and false believability that the artwork is real or familiar to what we see.

A three-dimensional object is anything that has length, width and height. To avoid listing most everything in the world, a few examples include: a box, a car, an apple, a tree, a building, a person and a book.

Illustrator allows the use of specially designed grids to act as a guide when drawing in perspective. To display the perspective grid with two vanishing points by default, choose in the menu View / Perspective grid / Show grid.

Drawing on a perspective plane

By default, the perspective grid with two vanishing points is displayed. To be able to adjust it, you need to select the Perspective Grid tool from the toolbox. To draw a shape based on one of the perspective planes, select the desired plane in the change plane widget, then draw the shape on the plane. To draw another shape on the other plane, change the plane in the widget and draw the second plane.



Steps to draw a perspective:

Place the horizon line

The most important decision is the placement of the horizon line in relation to the important characters and elements such as objects, furniture or buildings in the scene. It's useful to remember that the horizon is on the same level as the imagined eye of the viewer.

When you place the horizon line above the characters, it gives the viewer the impression that they're in a position higher up, looking down from a platform, say. If we imagine that our viewer is standing on the same surface as the other characters in the scene, then all standing figures in the scene will also have their head on the horizon line, with the exception of particularly tall or short characters.

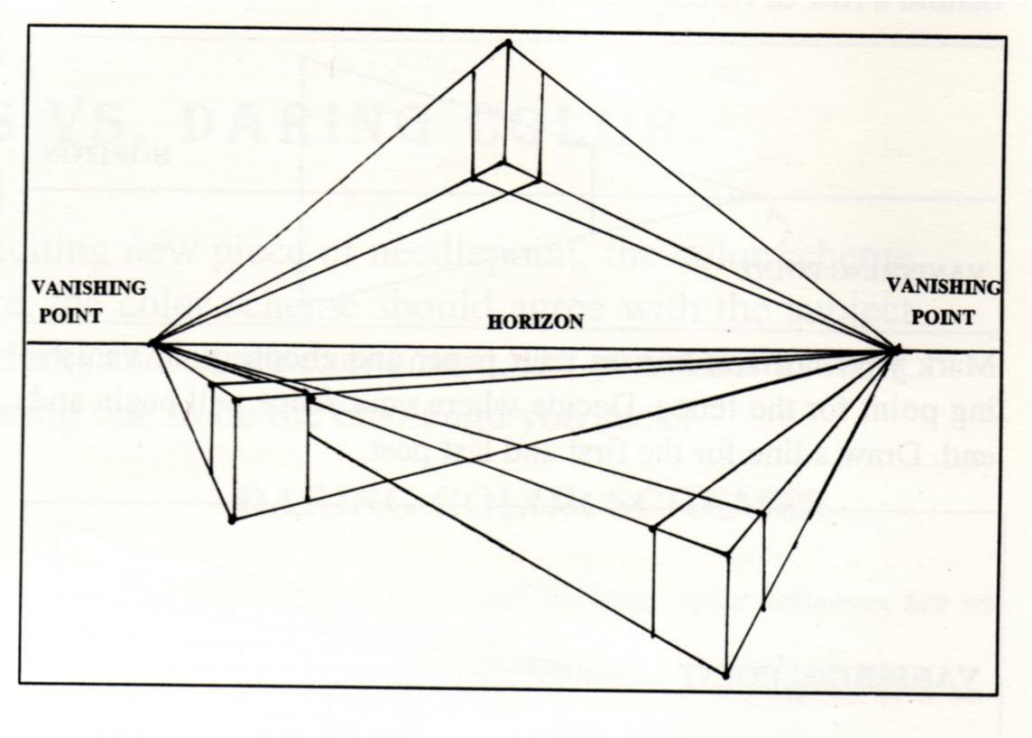
If the horizon line is low, and the characters stretch high above the horizon, then it appears as if the viewer is lying down on the same surface or standing on a lower platform looking up. In my graphic novel Square Eyes I would often set the horizon line either very low or very high in the drawing. It seemed to fit with the

tone of the book, in which the main character is often confused and disoriented by surroundings that either loom above her or stretch away in inhumanly vast vistas.

Utilise one-point perspective

In one-point perspective, horizontal lines on any plane perpendicular to the point of view will recede to a vanishing point that's located somewhere on the horizon line. Usually, I avoid putting the vanishing point right in the middle of the space that I'm drawing, because it tends to create too much symmetry in the view, making the composition feel static and a little unnatural. Yet sometimes this eerie calm can add to the atmosphere of the scene.

Create two-point perspective

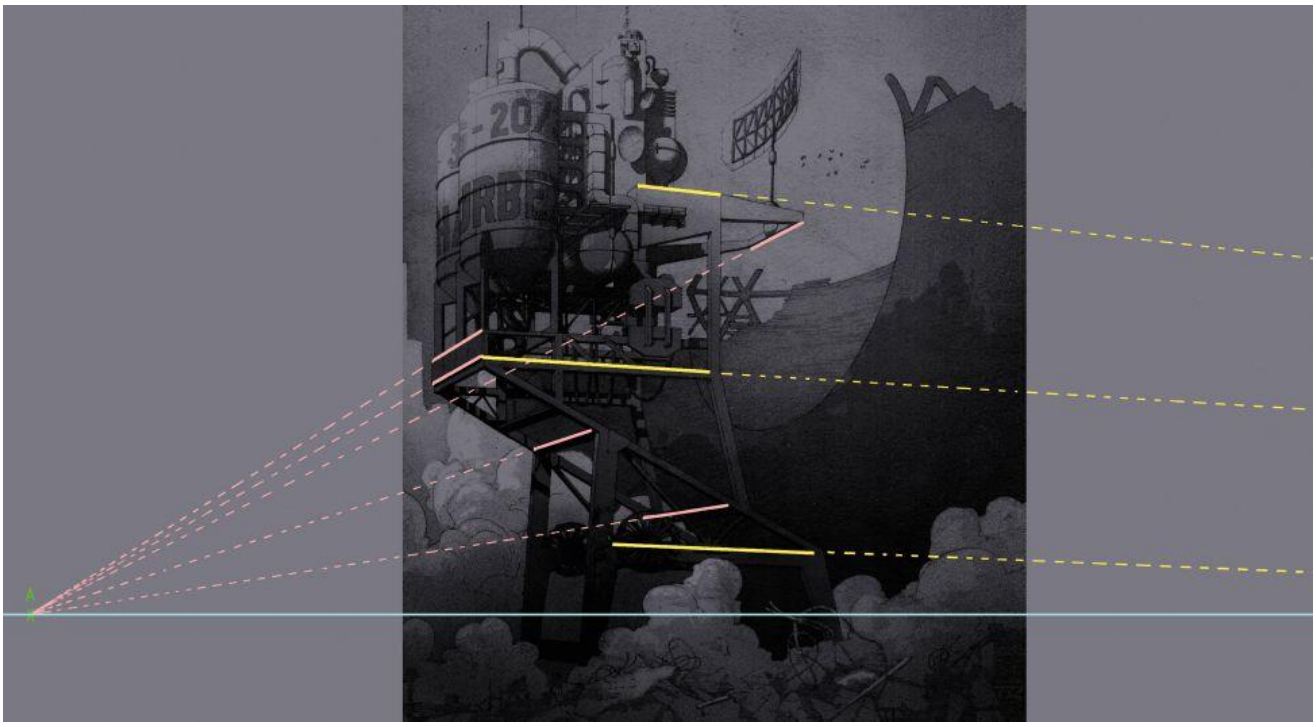


With this example of two-point perspective, both vanishing points are out of frame and the horizon line is centred on the image, giving a natural, low-tension feeling to the scene.

When drawing two-point perspective, I always place either one or both of my vanishing points outside the edges of the drawing. I find that when both the left and right vanishing points are inside the frame, dramatic perspective angles are created. This sometimes generates objects that look strangely stretched. For the

most part however, I want a more natural field of view, so I take care to locate the vanishing points in such a way that they create a good balance between drama and realism.

Up your skill using analogue tools



The image above shows two-point perspective with a low horizon line and vanishing point far right out of the frame to enhance the feeling of distance and scale. It's not always possible to have a ruler long enough or table wide enough to allow your ruler to be physically connected to the vanishing point. What's needed is a ruler that will reliably pivot about a point to which it's not actually connected. This was an enjoyably tricky problem that I grappled with for many years, before finally coming up with a solution that involved fixing three rulers together, which moved around two drawing pins.

Dive into digital tools

When drawing digitally in Photoshop, I find that it's usually too cumbersome to expand the canvas to draw all the perspective lines receding to a vanishing point to the far left or right outside the scene. In this case I tend to add a basic square grid for guidance, which I adjust to the main perspective lines using the program's Skew tool (Edit > Free Transform > Skew). This usually provides enough guidance that more detailed lines can be drawn by eye, even if they don't fall exactly on a gridline.

Drawing digitally also allows for some other timesaving shortcuts, particularly when drawing repeating elements in perspective, such as a building that has many windows of the same size and shape. Here's my method for depicting repeating elements. First, draw one window and save the file, calling it 'Single Window'. Next, create a new document, go to File > Place Linked... and choose your Single Window file. Add as many multiples of the window as you need, arranging them to suit the facade of the building that you are drawing. Then save the file as 'Facade 1'.

Now create a new document, and Place Linked file Facade 1. You can now skew the facade to the perspective that you need, without having to draw all the windows individually. In addition, if you make a change to your Single Window file, then all the copies will also update in the perspective view. Finally, link the facade file and skew to suit the perspective in the scene.

Embrace your errors

It's only when some extraordinarily complex shape is required that I ever use 3D modelling software to help generate the image. This is partly from a stubborn delight in a technical drawing challenge, but also because apart from the flexibility it gives you, it also allows for some mistakes. I feel it's in these small errors we make when we craft something by hand that some of our personality shows through in the work.

I feel like my inaccuracies are probably specific to me, and that I make the same small mistakes in similar ways over and over again when drawing. The nearer that a draughtsman gets to robotic perfection, the less present are the signs of a human

hand and mind creating those small inaccuracies that are unique to that artist, and I believe that, even if it takes a little longer, this is something that is worth preserving.