LINEAR PERSPECTIVE: Terminology

In the western art tradition **linear perspective** is a scientific method of determining the correct placement of forms in space and the degree to which such forms appear to diminish in size at a given distance. Non - western traditions often do not rely on this system to the same extent. **Empirical perspective** relies upon direct observation rather than on a set of rules.

The rules of linear perspective are dependent upon a single **fixed point of view**. Perspective drawing, in theory, demands that you not shift the position of your head or the direction of your gaze as you draw the scene.

All that can be seen without moving your eyes is contained within a **cone of vision.** The limits of your cone of vision (between 60 and 80 degrees) are easily determined by extending your arms and inscribing within a vertical circle all that can be seen clearly as you look directly forward.

The **picture plane** is an imaginary vertical plane that slices through the cone of vision.

The **horizon line** indicates where sky and earth would appear to meet if the ground were perfectly flat and nothing blocked the view. The placement of the horizon line determines the angle from which all objects are viewed, and its location must be established even when it does not appear on the picture plane.

The **ground plane** is a flat horizontal plane that extends to the horizon. It is also called the *floor plane* in drawings of interior spaces and the *table plane* when drawing objects on a table (still life). This means that the back and front edges of a table plane will coincide with the horizon line if you draw the table at eye level.

The **central line of vision** (which is centred in the cone of vision) is an imaginary line from the eye to the horizon line. Anything, such as the edge of a wall that lies exactly in the line of vision will appear as a vertical line. Extended, it will meet the horizon line at a right angle.

The point of intersection of horizon line and central line of vision is called the **central vanishing point** (C.V.P., or *centre of vision*). The C.V.P. lies directly opposite the viewer and is the point on the horizon where objects disappear from view.

Parallel lines by definition always remain equidistant, yet in our common visual experience they appear to converge as they recede. The basis of **one-point perspective** is that all lines parallel to our line of vision, whether to the side, above, or below will appear to meet at the C.V.P.

Blocks placed square to the picture plane are drawn in one-point perspective; blocks set at an angle to the picture plane necessitate the introduction of **two-point perspective** or the use of two vanishing points.

In perspective, vertical lines remain vertical as long as the head is held level. The corners of a rectangular object placed above or below eye level continue to appear vertical as long as the object is viewed from sufficient distance. When the same object is viewed close up, so that you must tip your head to see it, the corners appear at a V.P. above or below. **Three-point perspective**, with the use of three vanishing points, must be employed to draw such an object.