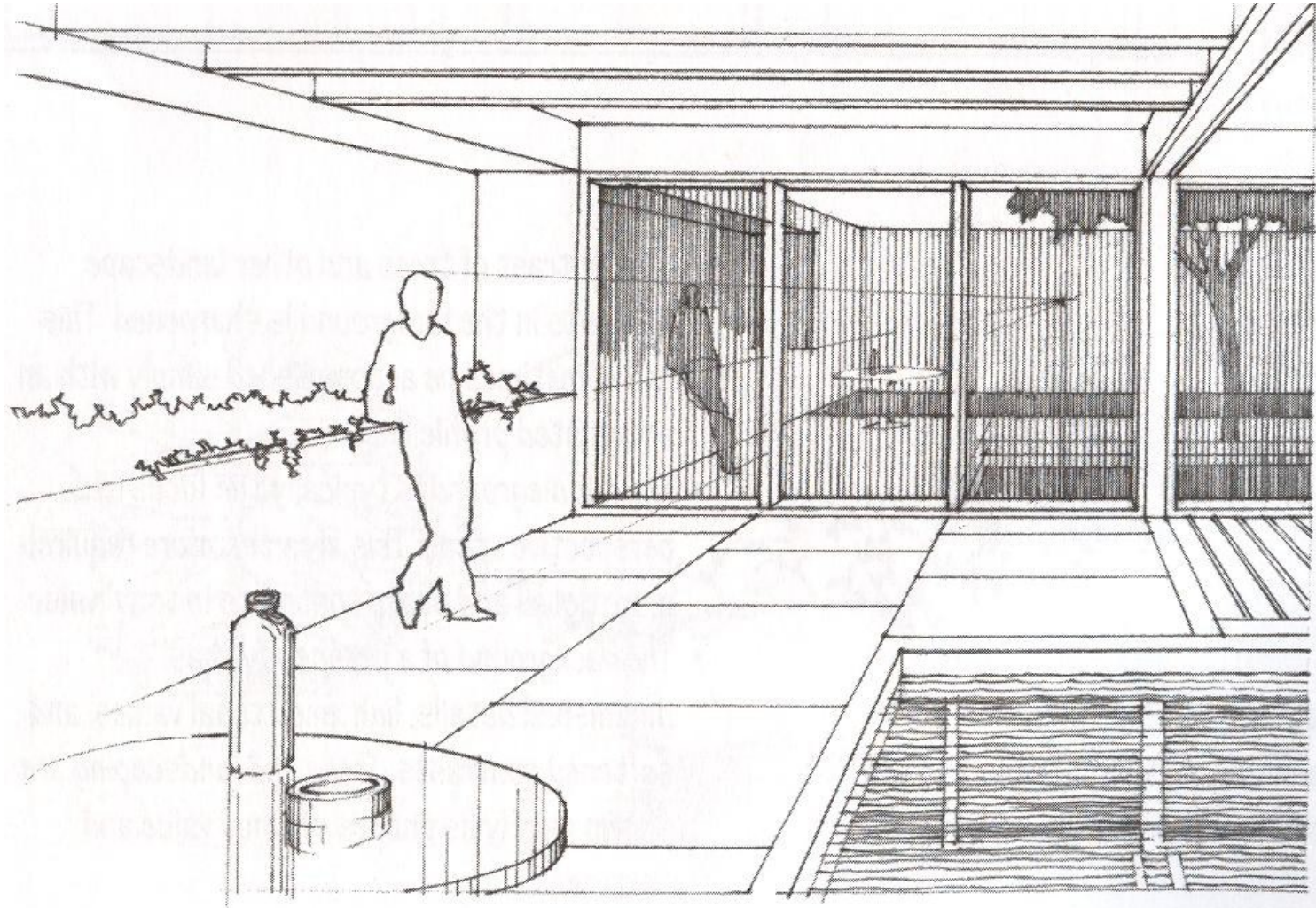


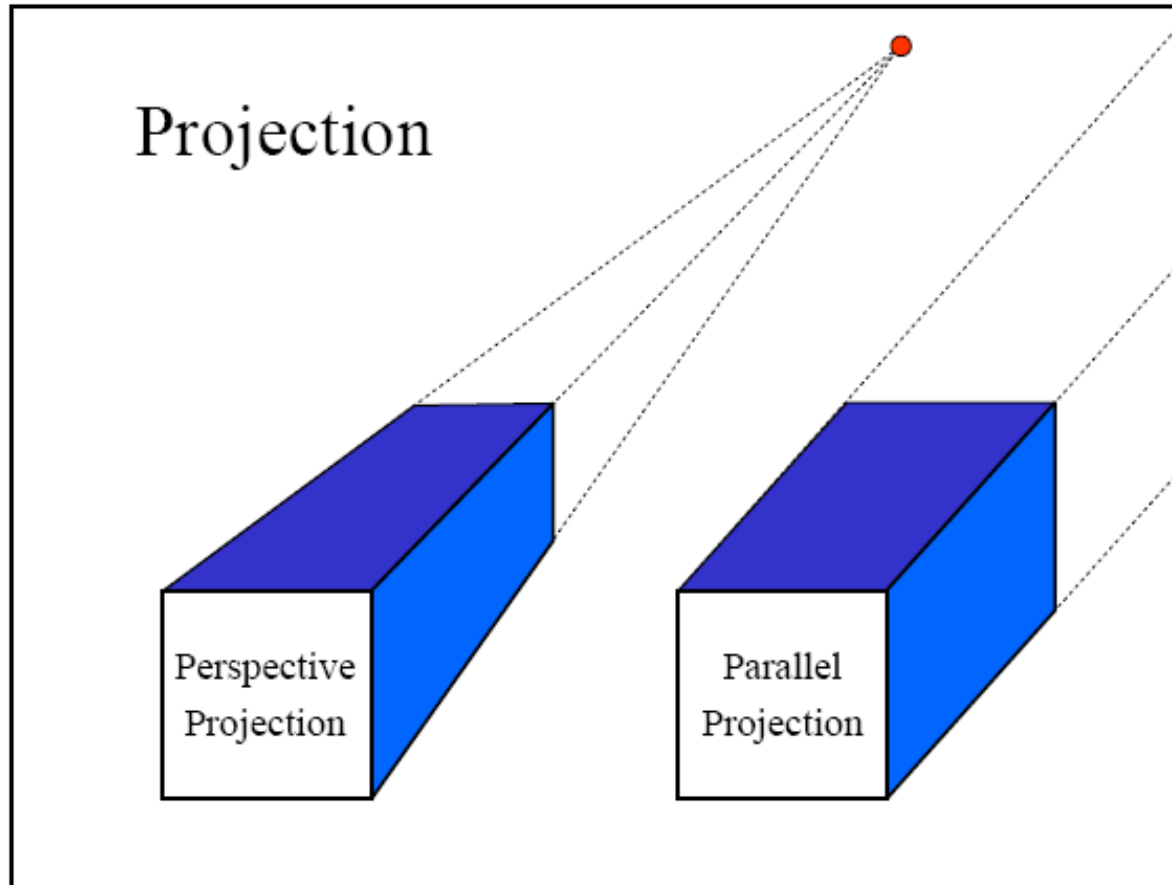
Perspective Drawing



Perspective

- ▶ Perspective is a geometric method of representing on paper the way that objects appear in real life i.e. they get smaller and closer together the further away they are from the eye of an observer.
- ▶ It is the most realistic of all pictorial drawings.
- ▶ It is the way real three-dimensional objects are pictured in a photograph that has a two-dimensional plane.
- ▶ Perspective or central projection is used in creative art or technical sketching but seldom in technical drawing.

Projections

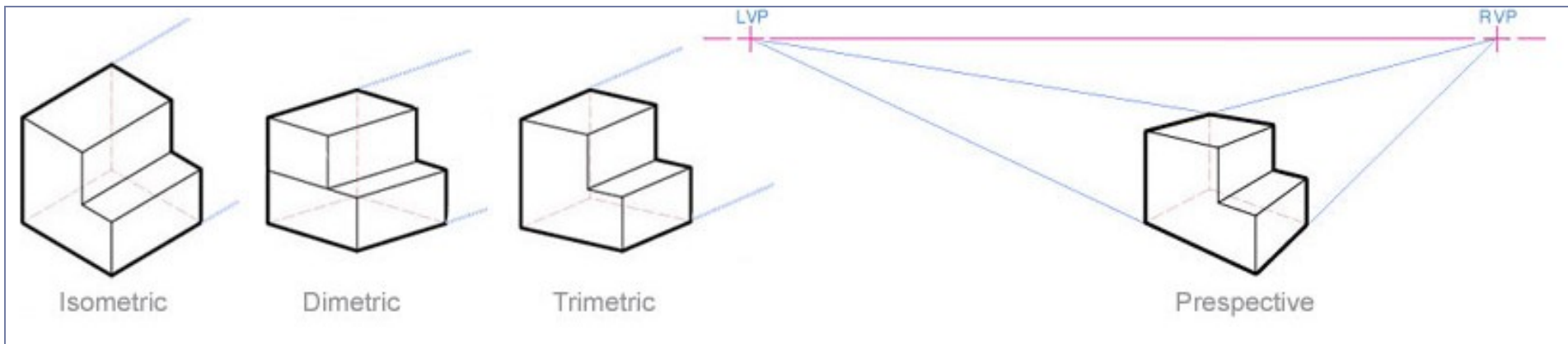


Projectors or line of sights are not parallel to each other.

Pictorial drawings

Perspective drawings differ from other types of pictorial drawings. In Isometric, Dimetric, and Trimetric drawings, the lines remain parallel and never converge at a single point.

They are useful for conveying technical information but lack the quality of realism when compared to the perspective view.

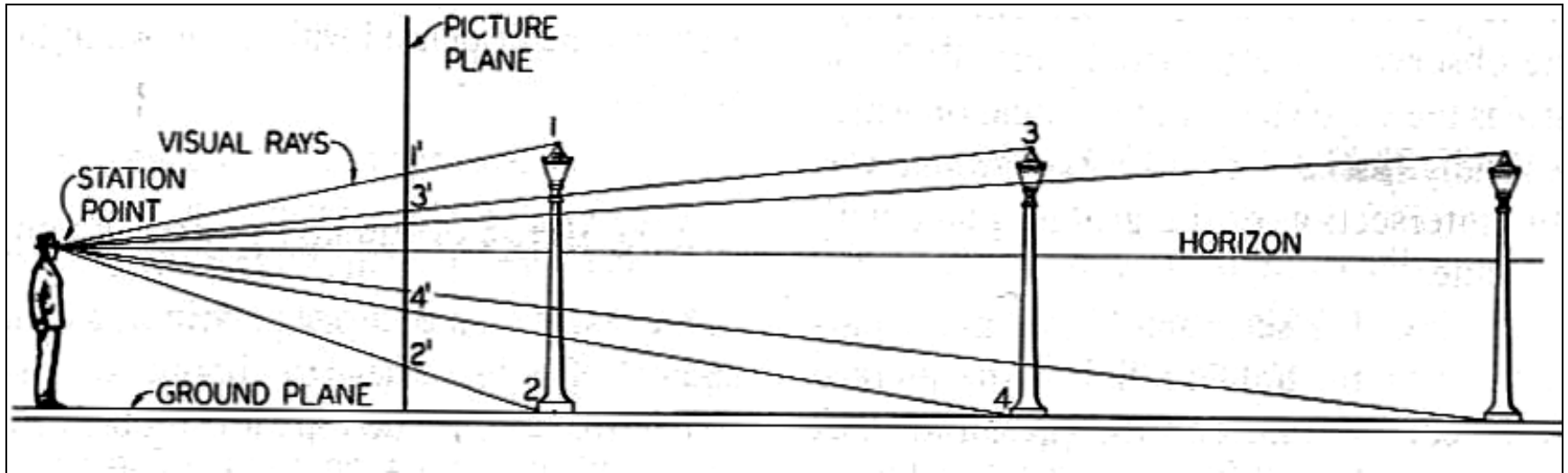


Perspective System

MAIN ELEMENTS

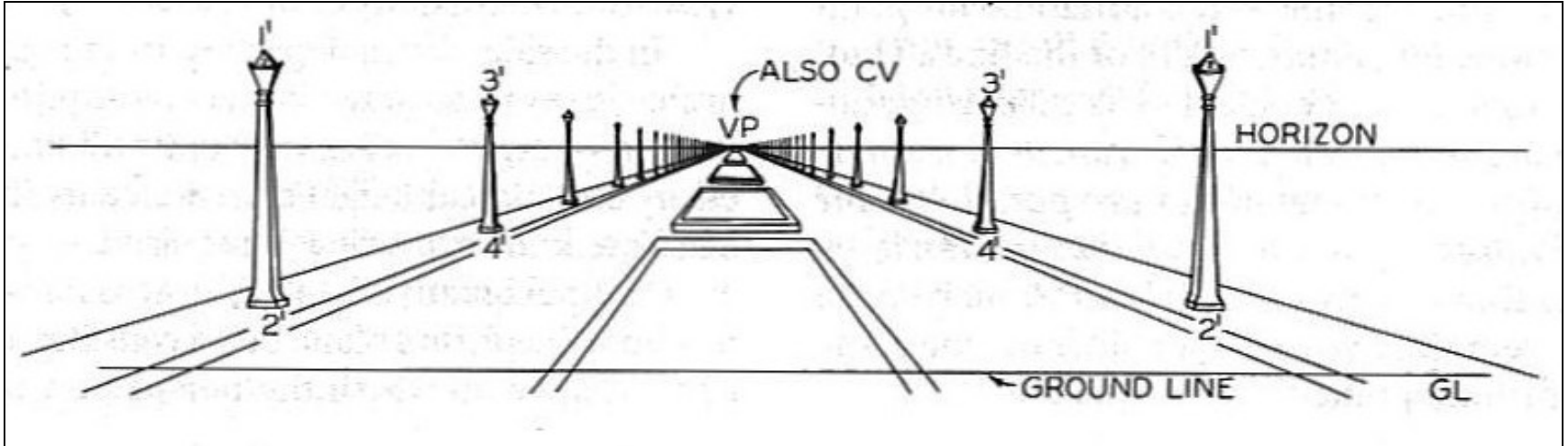
1. The observer's eye.
2. The object.
3. The plane of projection.
4. Line of sight.

Perspective System



- ▶ Observer's eye: is station point (SP).
- ▶ The visual rays: are the line of sights.
- ▶ Picture plane: is the plane of projection or the paper.
- ▶ Visual ray at eye level marks horizon on picture plane.

Vanishing Point



- ▶ The lines parallel to each other but not parallel to the picture plane converge towards a single point on the horizon - **VANISHING POINT**

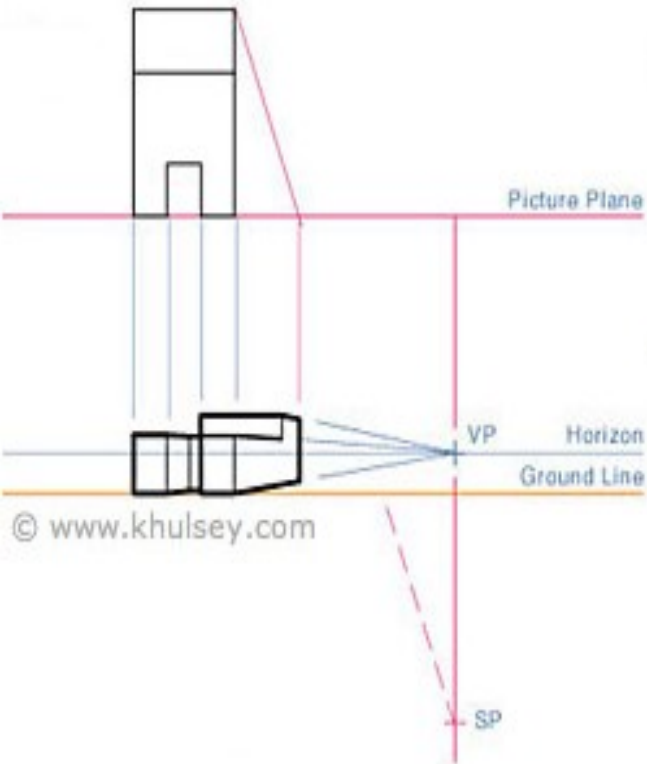


Notes

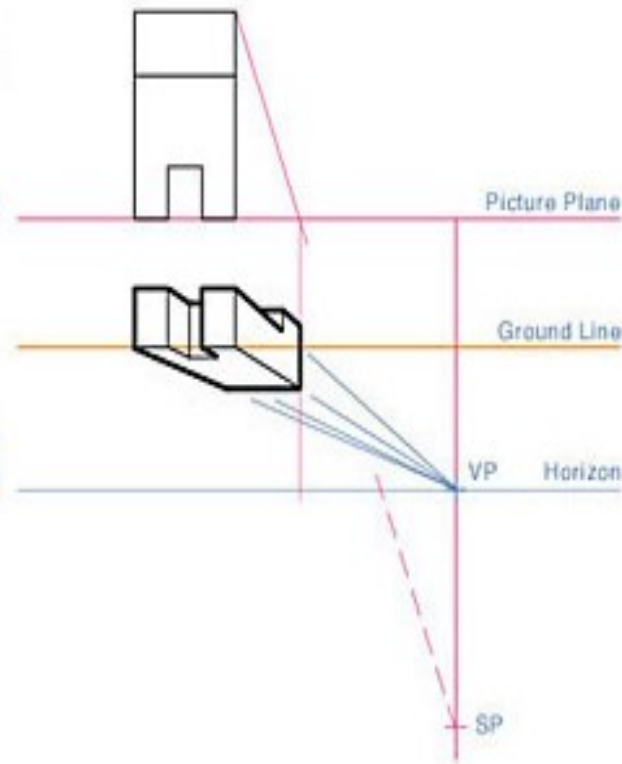
- ▶ Observer's eye is station point SP
- ▶ Visual ray at eye level marks horizon on picture plane. The horizon line (HL) is the position of horizon.
- ▶ The central line of sight should direct towards the centre of interest.
- ▶ The location of the picture plane (PP) determines the size of the object on the PP. Moving the PP alters perspective or scale but not proportion.
- ▶ The lines parallel to each other but not parallel to the PP (horizontal lines) converge towards a single point on the horizon - Vanishing points (VP)
- ▶ The ground line (GL) represents the edge of ground plane on which object rests. GL defines the lower limit of drawing.

Perspectives

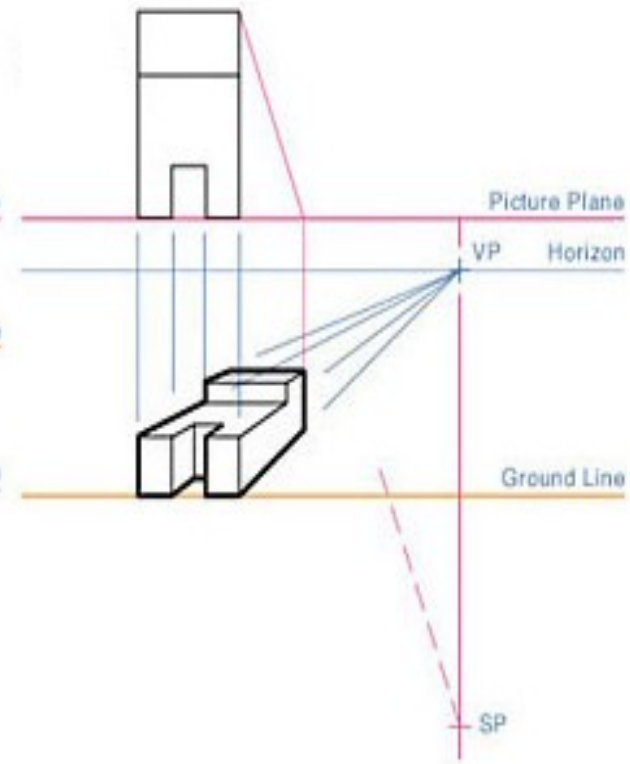
normal view



worm's view



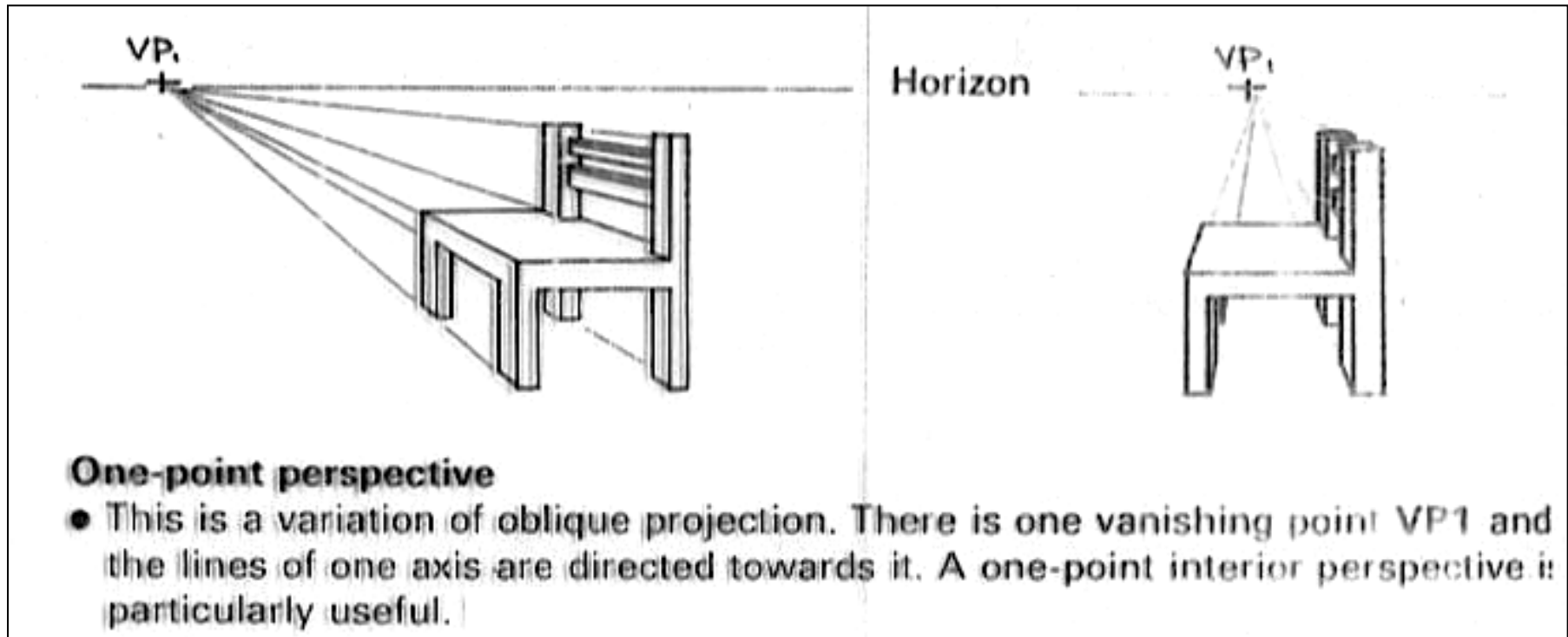
bird's view



Types of Perspective

- ▶ 1-point perspective/Parallel perspective.
- ▶ 2-point perspective/Angular perspective.
- ▶ 3-point perspective.

One-point Perspective



- ▶ One face of object is parallel to picture plane, one VP