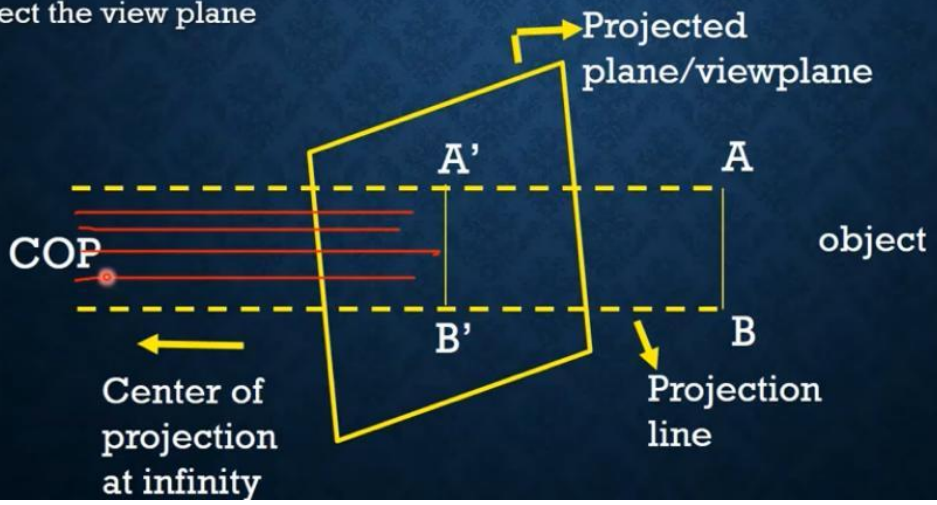
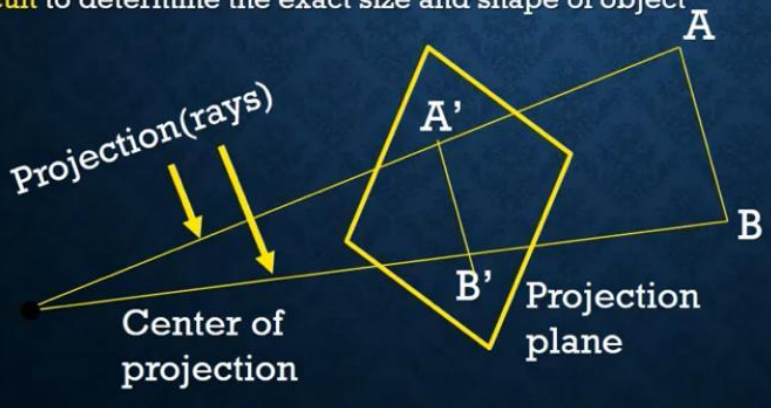
PARALLEL PROJECTION

- In this, coordinate positions are transformed to the view plane along parallel lines
- A projection is said to be parallel, if center of projection (COP) is at infinite distance from the projected plane.
- The projection lines are parallel to each other and extended from the object and intersect the view plane



PERSPECTIVE PROJECTION

- The projection is said to be perspective projection, if the center of projection is at finite distance from the projected plane.
- Visual effect is similar to human visual system
- Objects appear smaller as distance from center of projection (COP) (eye of observer) increases
- Difficult to determine the exact size and shape of object

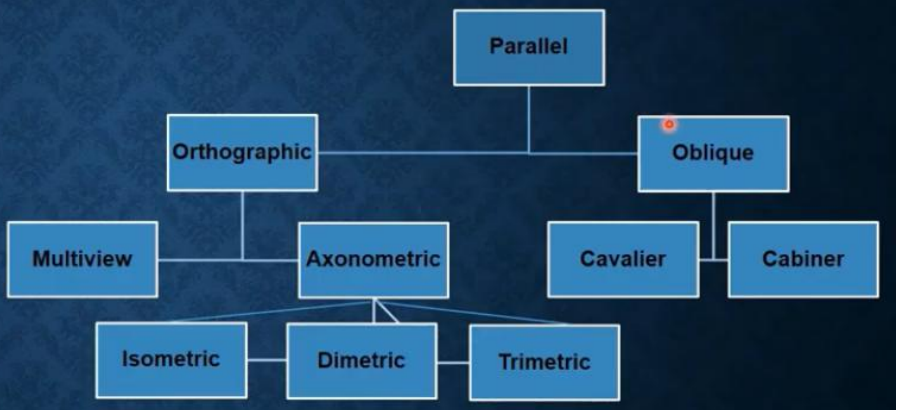


PARALLEL PROJECTION

- Divide into 2 types:

1) Orthographic

2) Oblique



Orthographic

In orthographic projection the direction of projection is normal to the projection of the plane.

OBLIQUE

- In oblique projection, the direction of projection is not normal to the projection of plane.
- We can view the object better than orthographic projection
- There are 2 types of oblique projection:
  - Cavalier
  - Cabinet

- Cavalier: The projected line making **an angle 45 degree** with projected plane, as a result the line of the object length will not change.

PERSPECTIVE PROJECTION

- There are 3 types of perspective projections:
  - One point Perspective projection is simple to draw
  - Two point Perspective projection gives better impression of depth
  - Three point Perspective projection is most difficult to draw