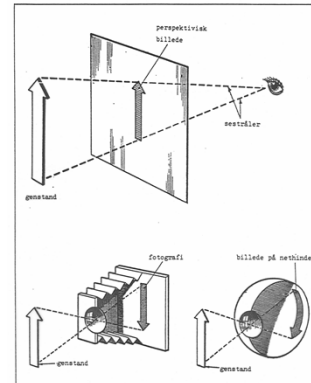
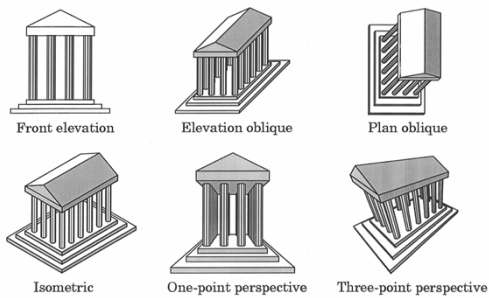


Projections

Niels Jørgen Christensen
IMM, DTU

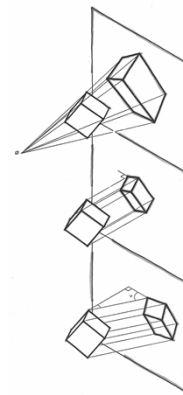


Images - Projection



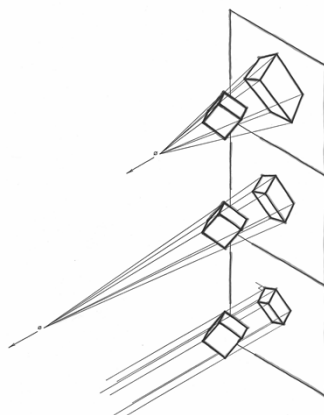
Projection

- Central
 - central
- Retvinklet parallel
 - orthographic
- Skrå parallel
 - oblique



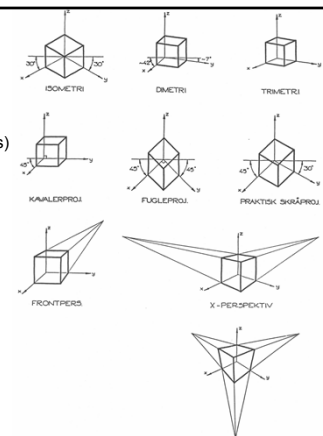
Projection

- From
- Central
 - To
- Parallel
 - Orthographics
- Move the eye towards ∞

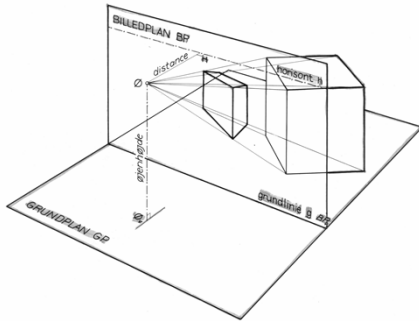


Images

- Aksonometric
 - Retvinklet (orthographics)
 - Isometric
 - Dimetric
 - Trimetric
 - Skrå (Oblique)
 - Kavalierprojektion
 - Fugleprojektion
 - Praktisk skråprojektion
- Perspective
 - Front
 - X-
 - 3 points



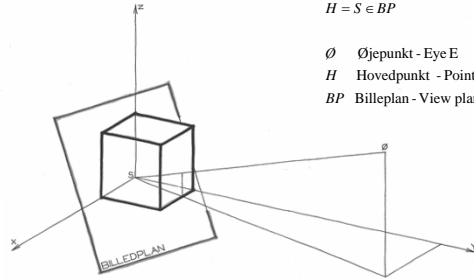
Perspective arrangement - classic



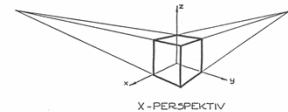
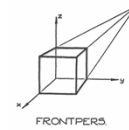
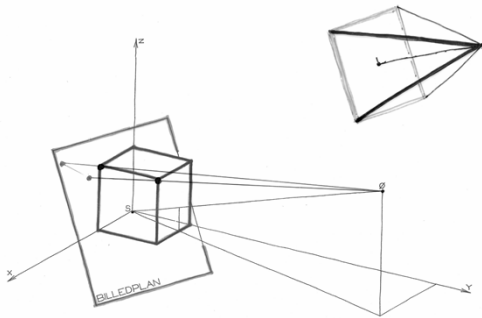
Perspektive arrangement - Computer

$$\begin{aligned} \emptyset H &\perp BP \\ H &= S \in BP \end{aligned}$$

\emptyset Øjepunkt - Eye E
H Hovedpunkt - Point of Sight S
BP Billeplan - View plane VP



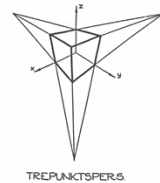
Projection rays - Frustum



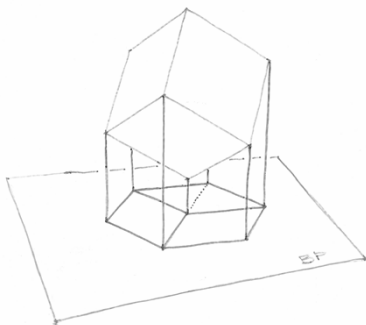
Front : $BP \parallel$ two coordinate axes
X : $BP \parallel$ one coordinate axis
3 - points : $BP \perp$ any coordinate axis

$$\begin{aligned} \emptyset H &\perp BP \\ H &\in BP \end{aligned}$$

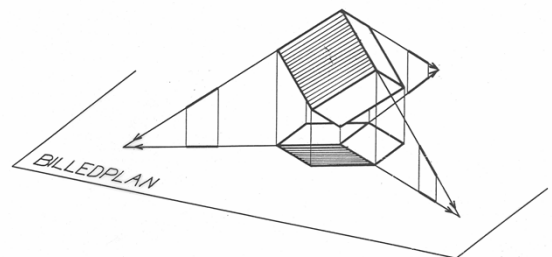
Figur a5.3



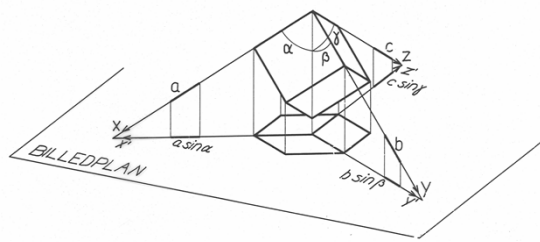
Retvinklet parallelprojektion Orthographic parallelprojection



Axonometric



Reduction angles - reduktionsvinkler Measures - Målestoksforhold



Retvinklede (orthographics) axonometric

	OPSTILLINGEN	15°	30°	45°
0°	OPSTILLINGEN			
15°				
30°				
45°				
60°				
90°	PLAN			

