VIEW & PROJECTION MATRIX

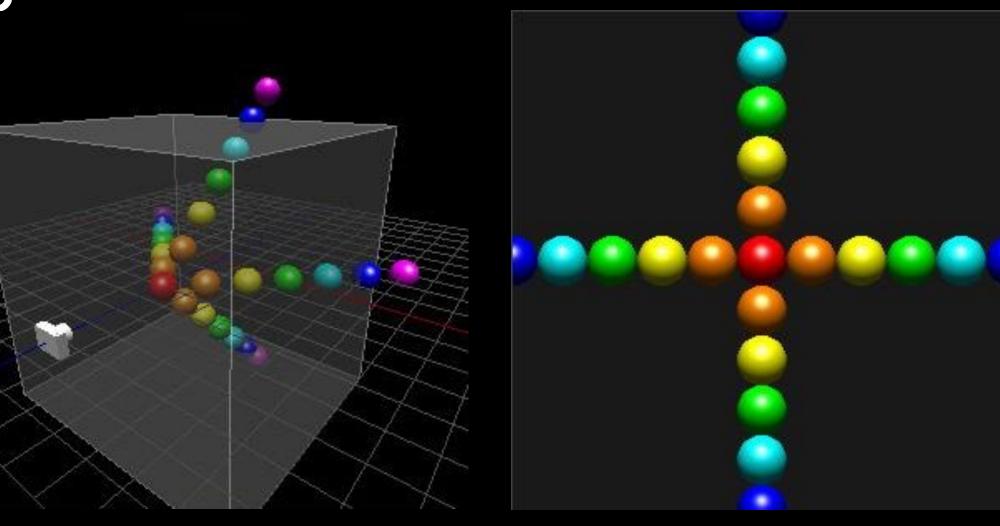
- Per default: OpenGL's camera is at (0,0,0) looking towards the -z direction
- Everything in normalized device coordinates (NDC) in range [-1,1]
- View matrix modifies the location of the OpenGL's camera
- Projection Matrix
 - Projects a 3D scene onto the 2D rendering surface
 - Projection methods
 - Orthographic projection (parallel lines remain parallel)
 - Perspective projection (parallel lines converge)
- Each vertex v is modified by model M, view V, and projection P matrices:

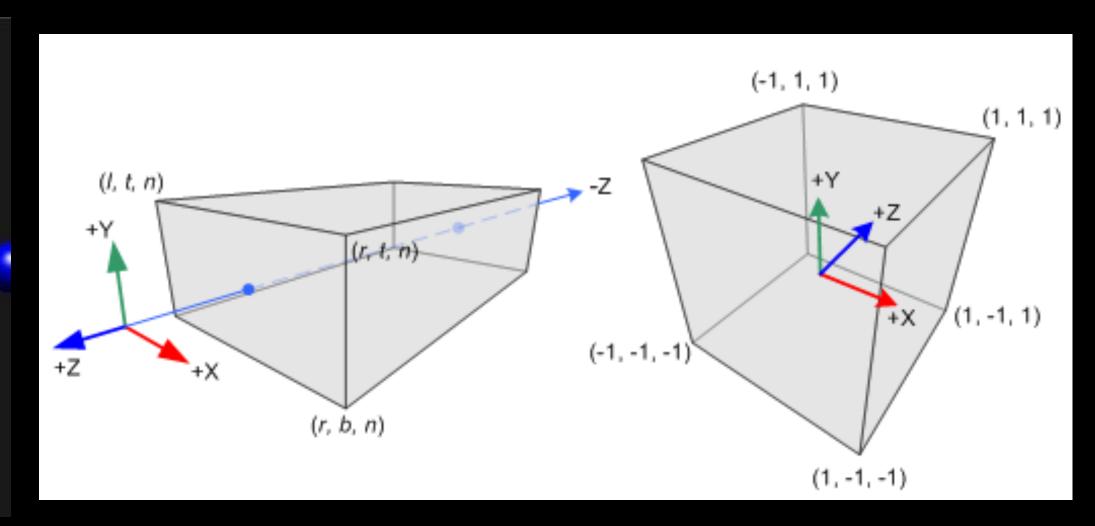
$$x = P * V * M * V$$



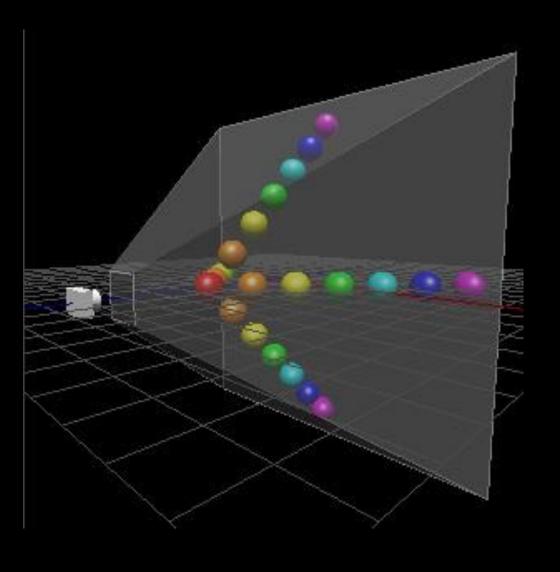
PROJECTIONS

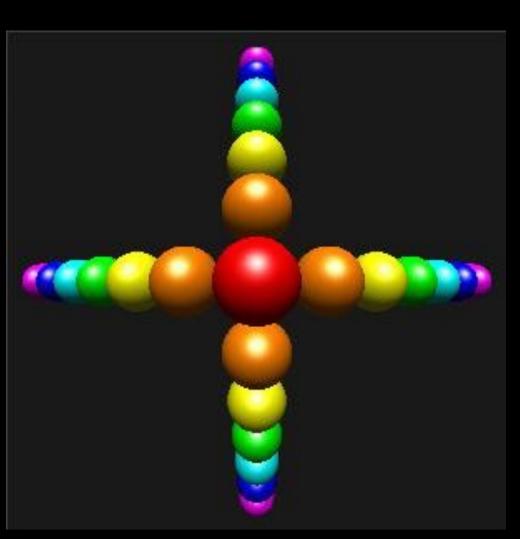
Orthographic projection

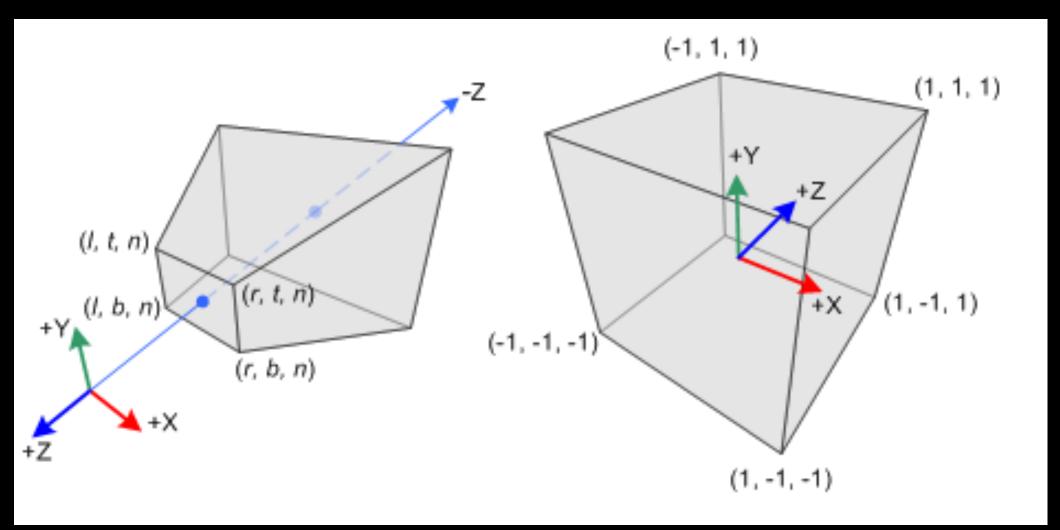




Perspective projection







[Song Ho Ahn]
"OpenGL", http://www.songho.ca

