CPSC 453

Lab 6

3.10.2007

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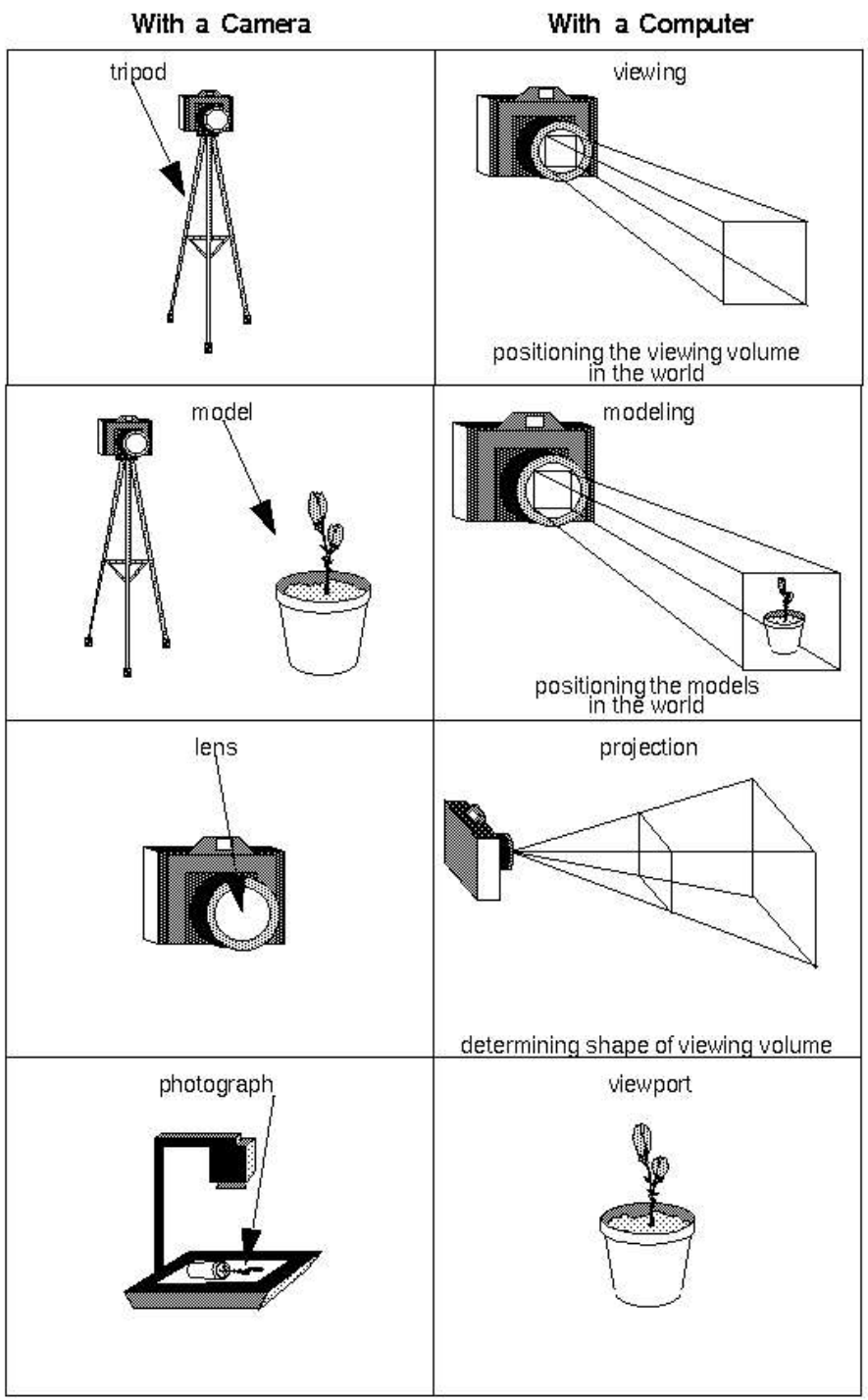
Review

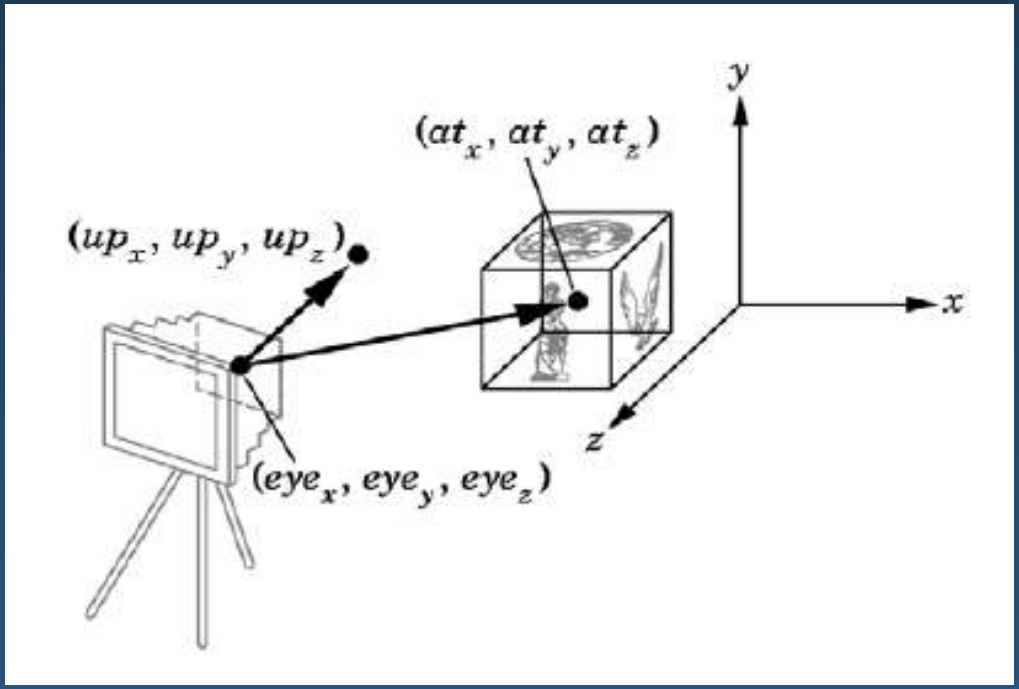
- gluLookAt


With a Camera
With a Computer
tripod
viewing
positioning the viewing volume in the world
model
modeling
positioning the models in the world
lens
projection
determining shape of viewing volume
photograph
viewport

(The Red Book)

gluLookAt

gluLookAt(eyex, eyey, eyez,
centerx, centery, centerz,
upx, upy, upz)



(Angel, 2000)

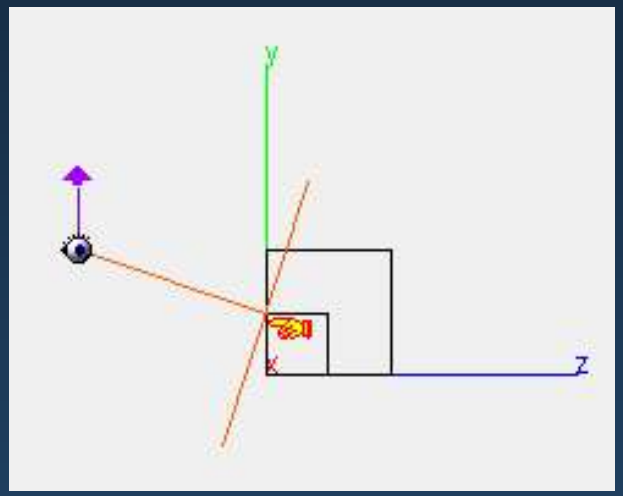
gluLookAt

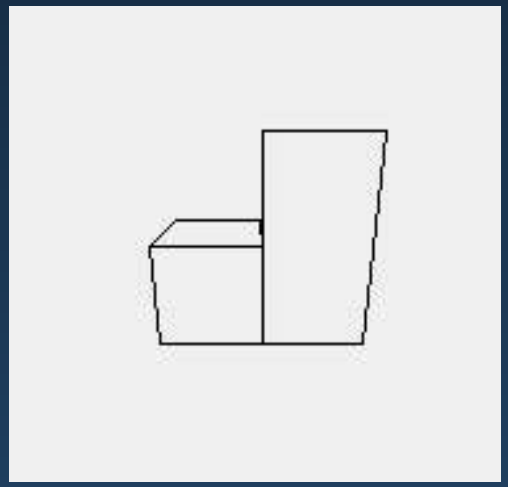
- Computes viewing matrix and multiplies it onto the current matrix stack
- Use on GL_MODELVIEW_MATRIX
- Projection matrix: attribues of camera
- Modelview matrix: orientation & location of camera

When it doesn't work

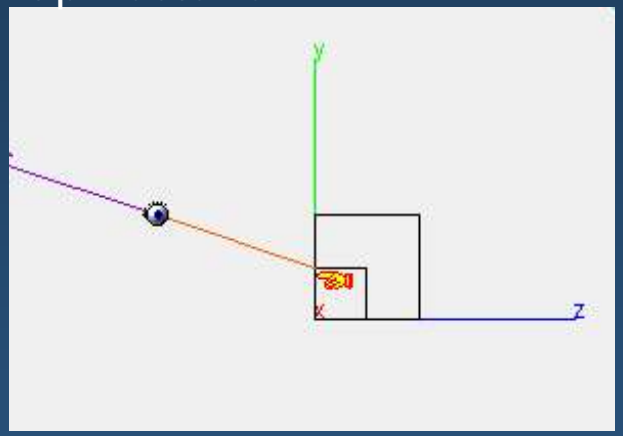
- Is your geometry between *near* and *far*?
- The UP vector must not be parallel to the line of sight from the eye point to the center

When it doesn't work





Up-vector ok



Up-vector in line with view vector

http://www.gris.uni-tuebingen.de/edu/projects/grdev/applets/camtrans/html/index_en.html