3D-Virtual Reality
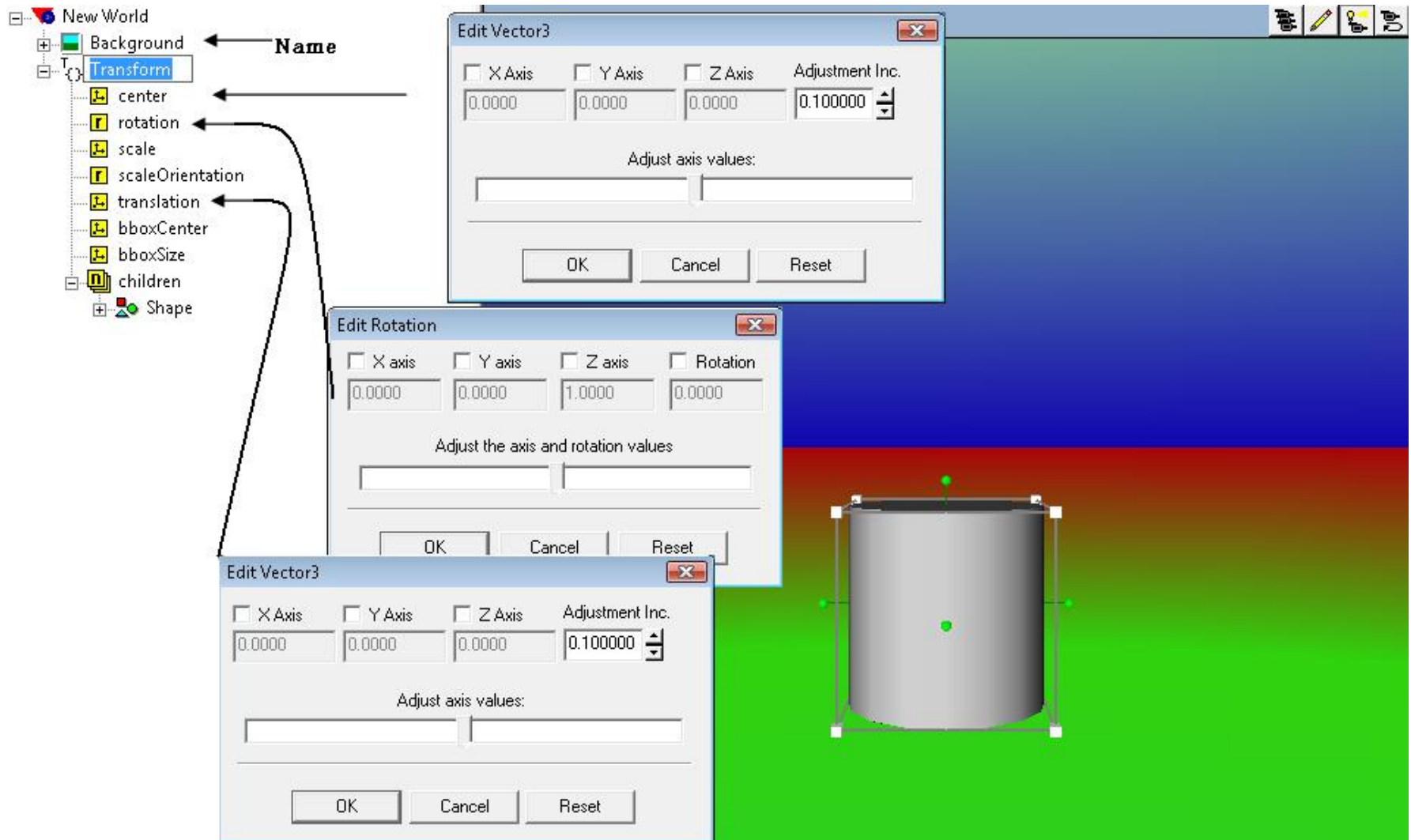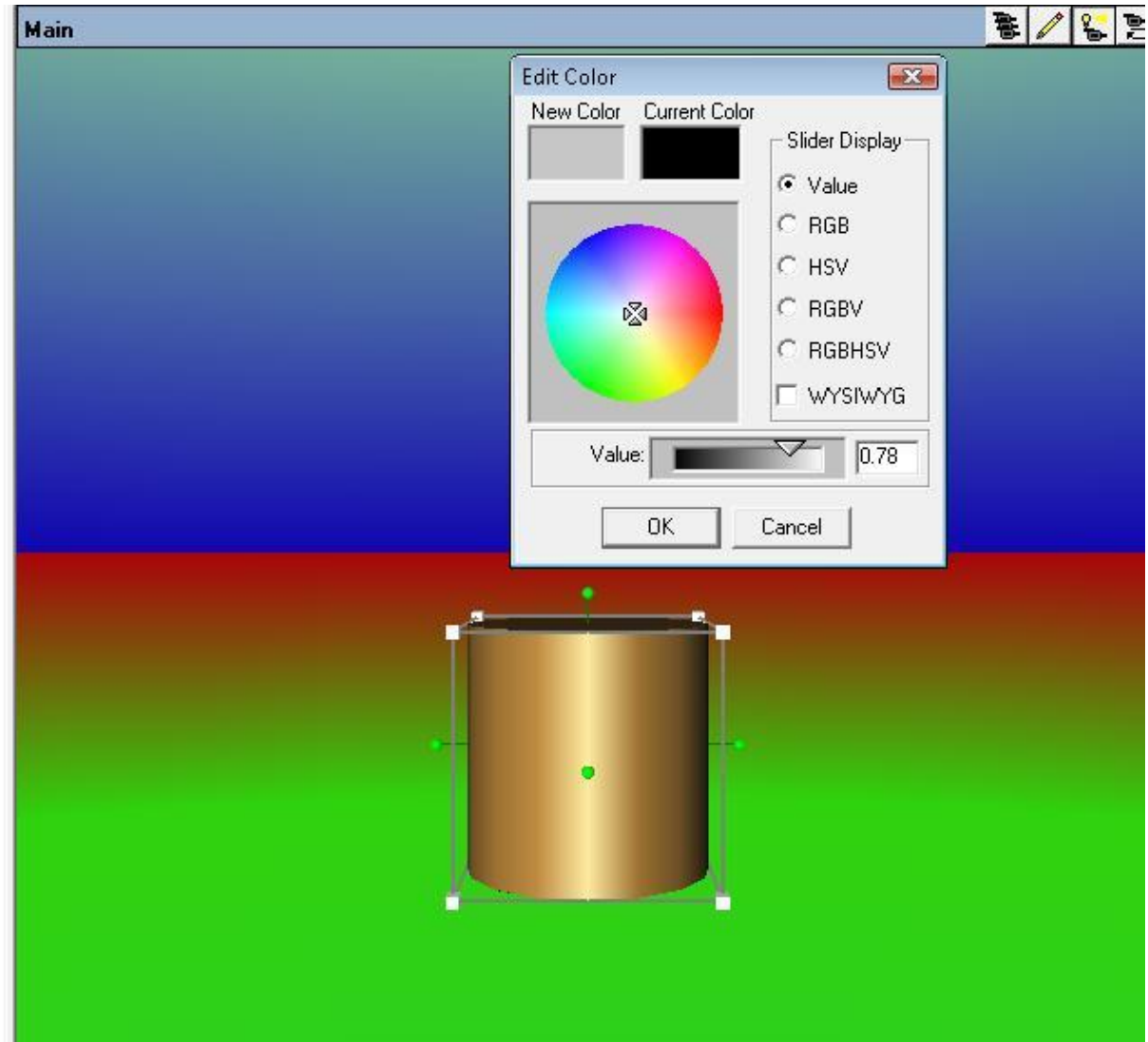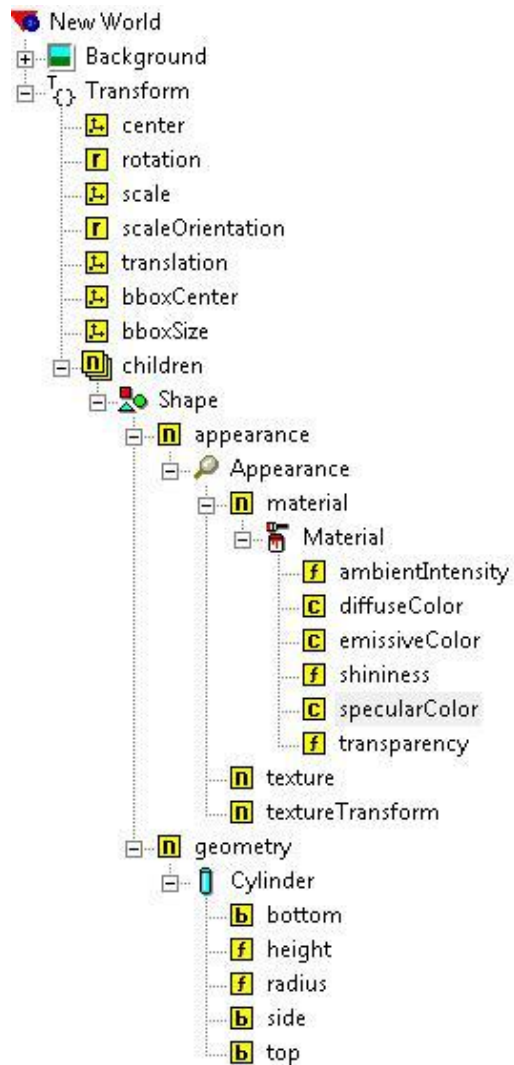
Who do I Direct MATLAB to use OpenGL
on MATLAB environment
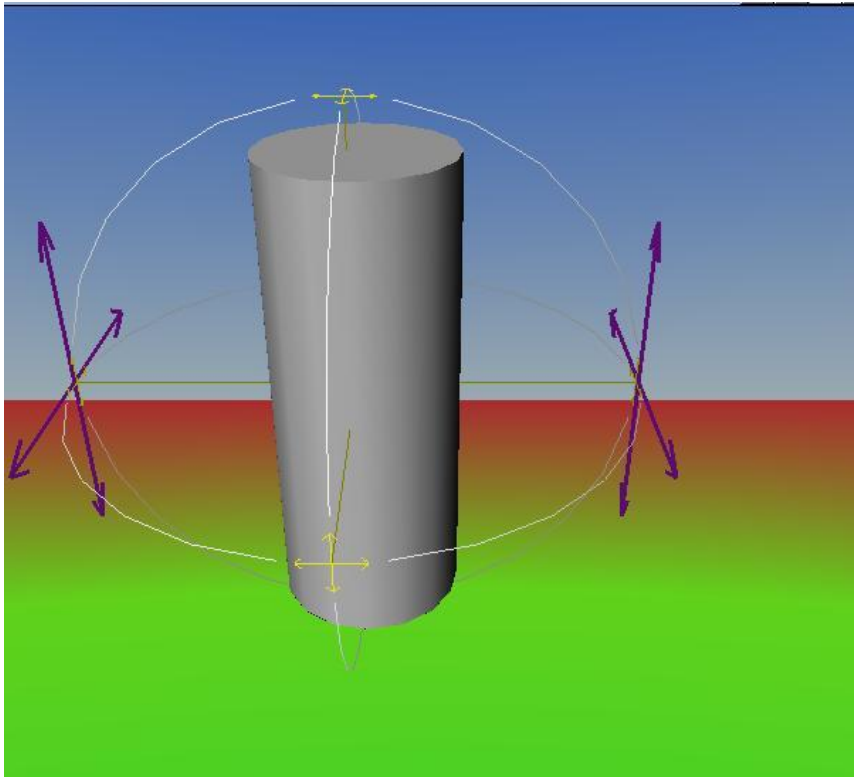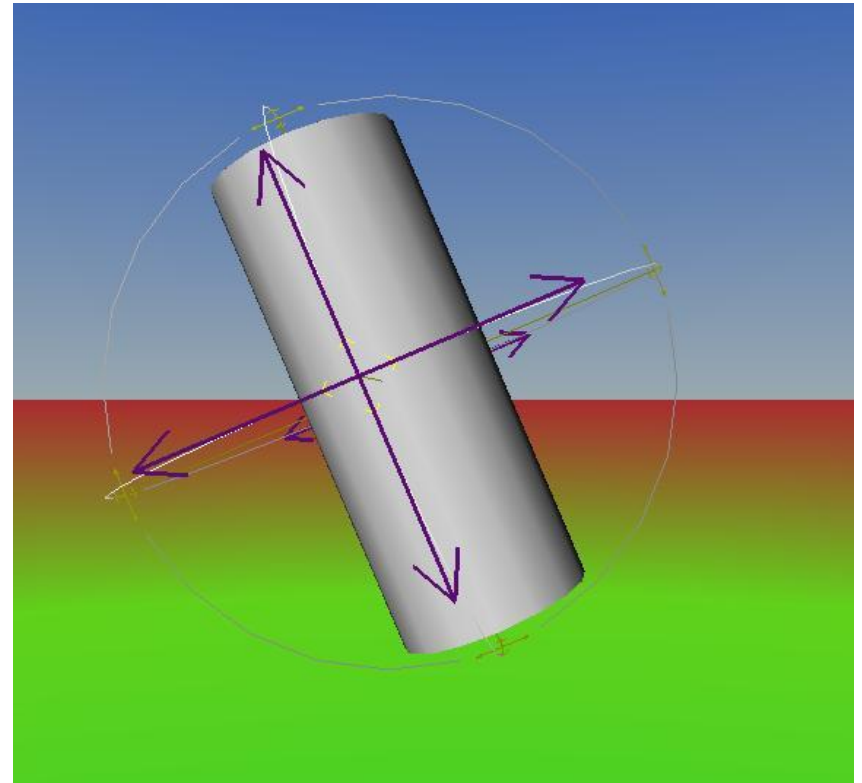
Add an Object TO VR Environment

SpecularColor and DifuseColor Property
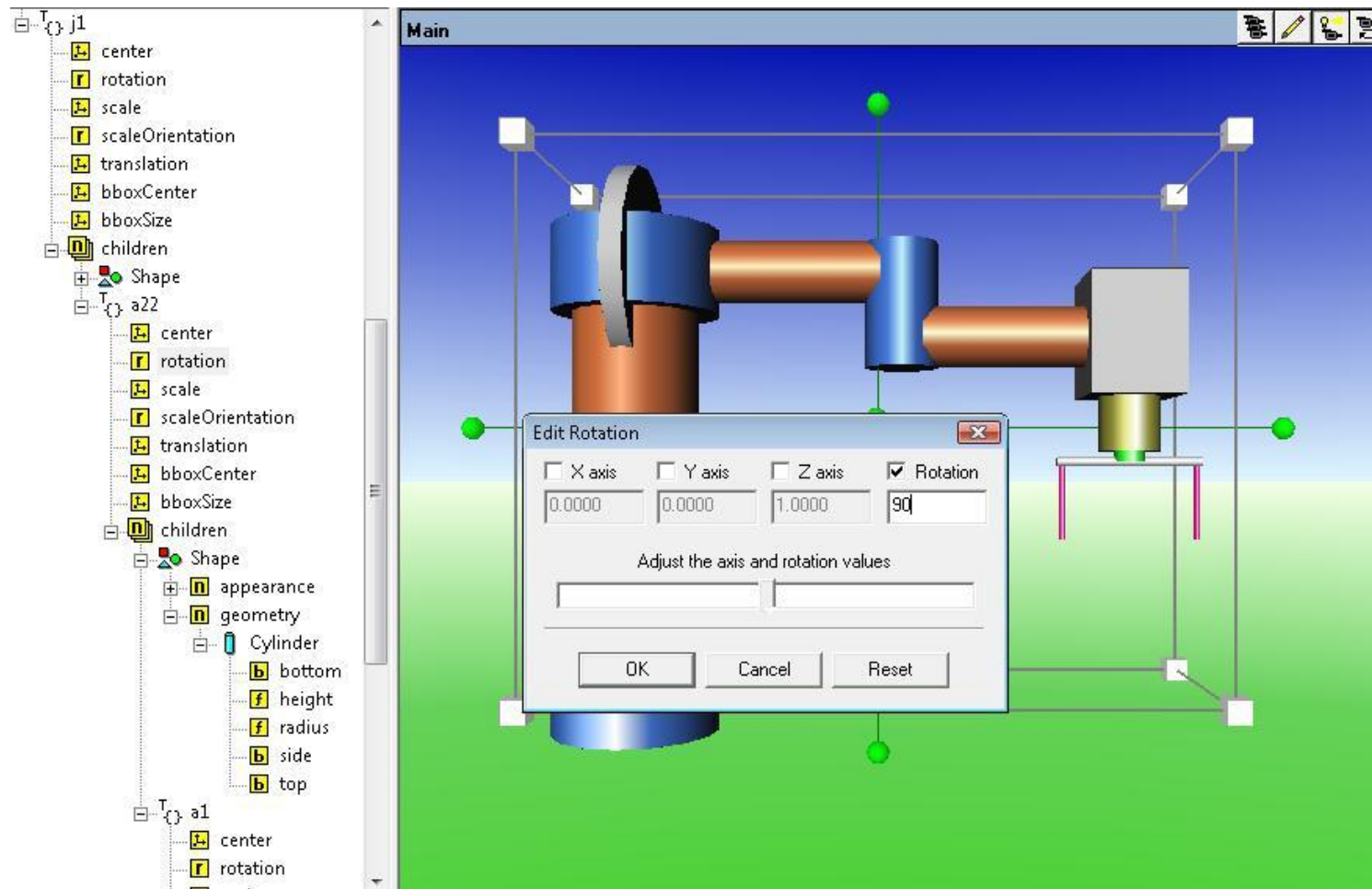
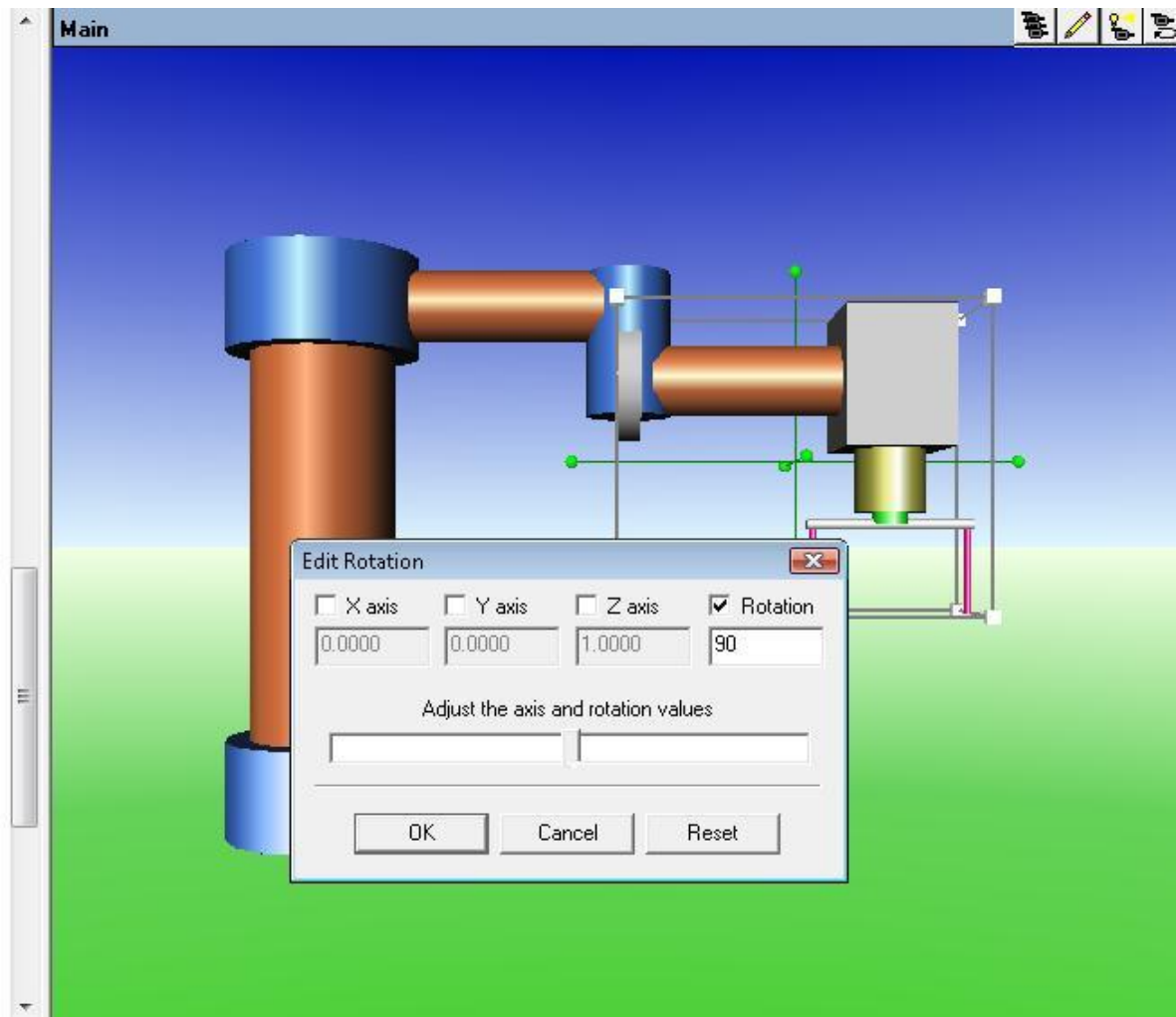# X,Y, and Z axes of Rotation
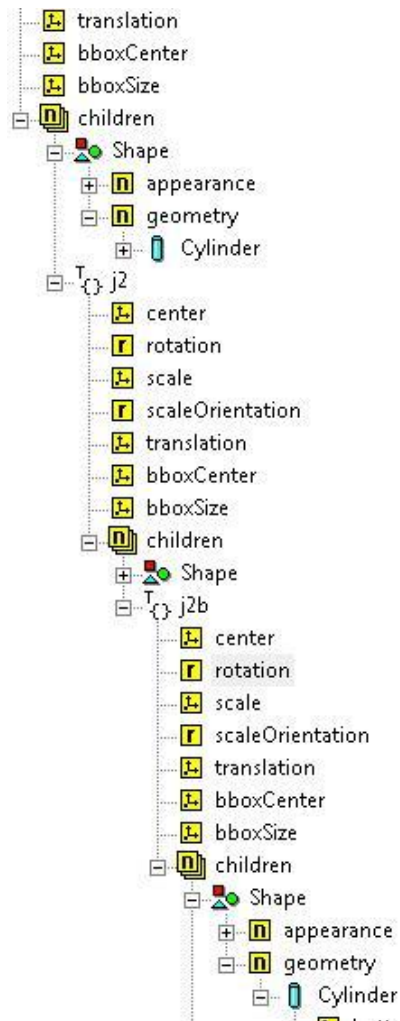

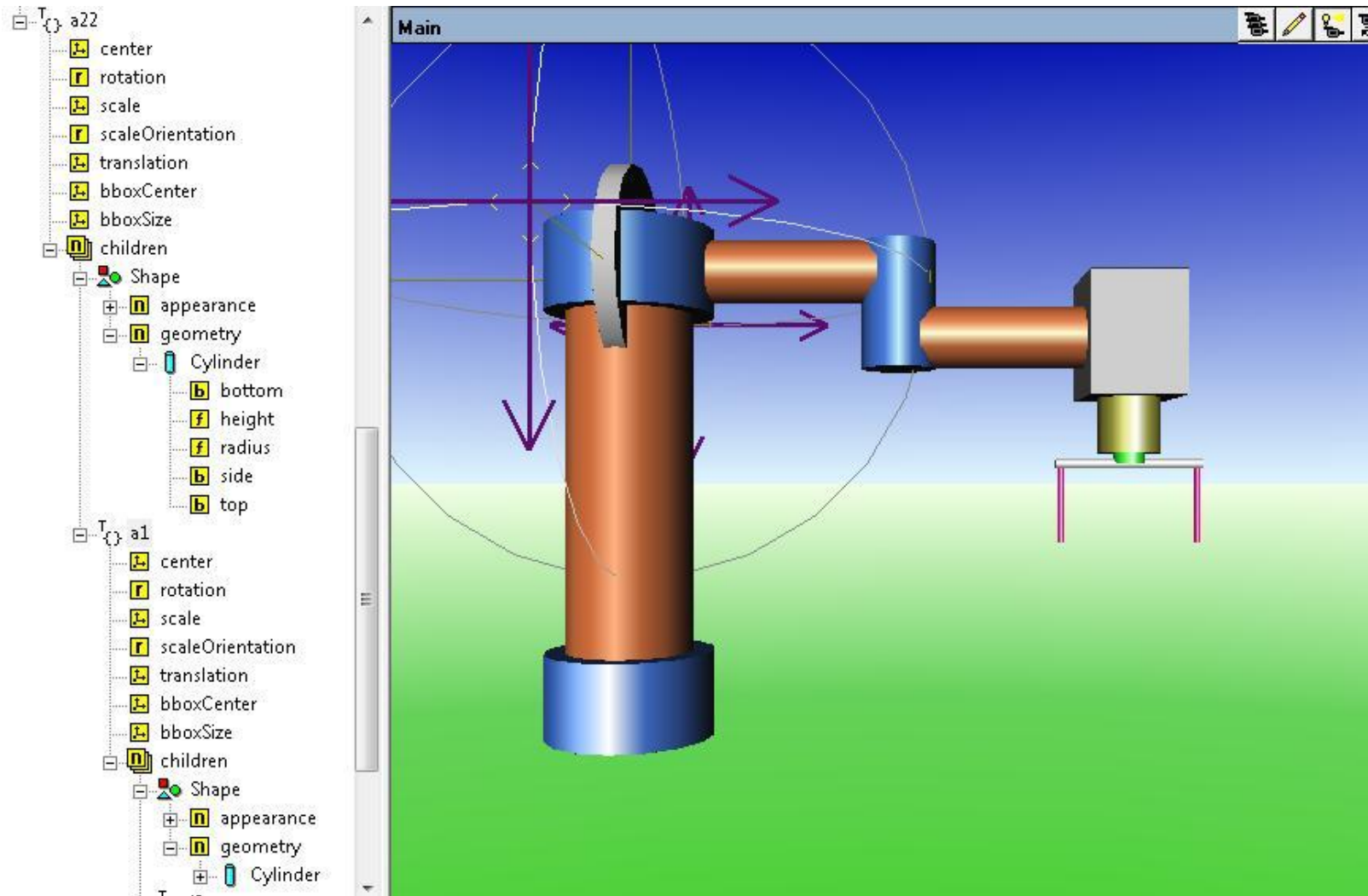**Rotation about X-Axis**

Rotation about Z-Axis

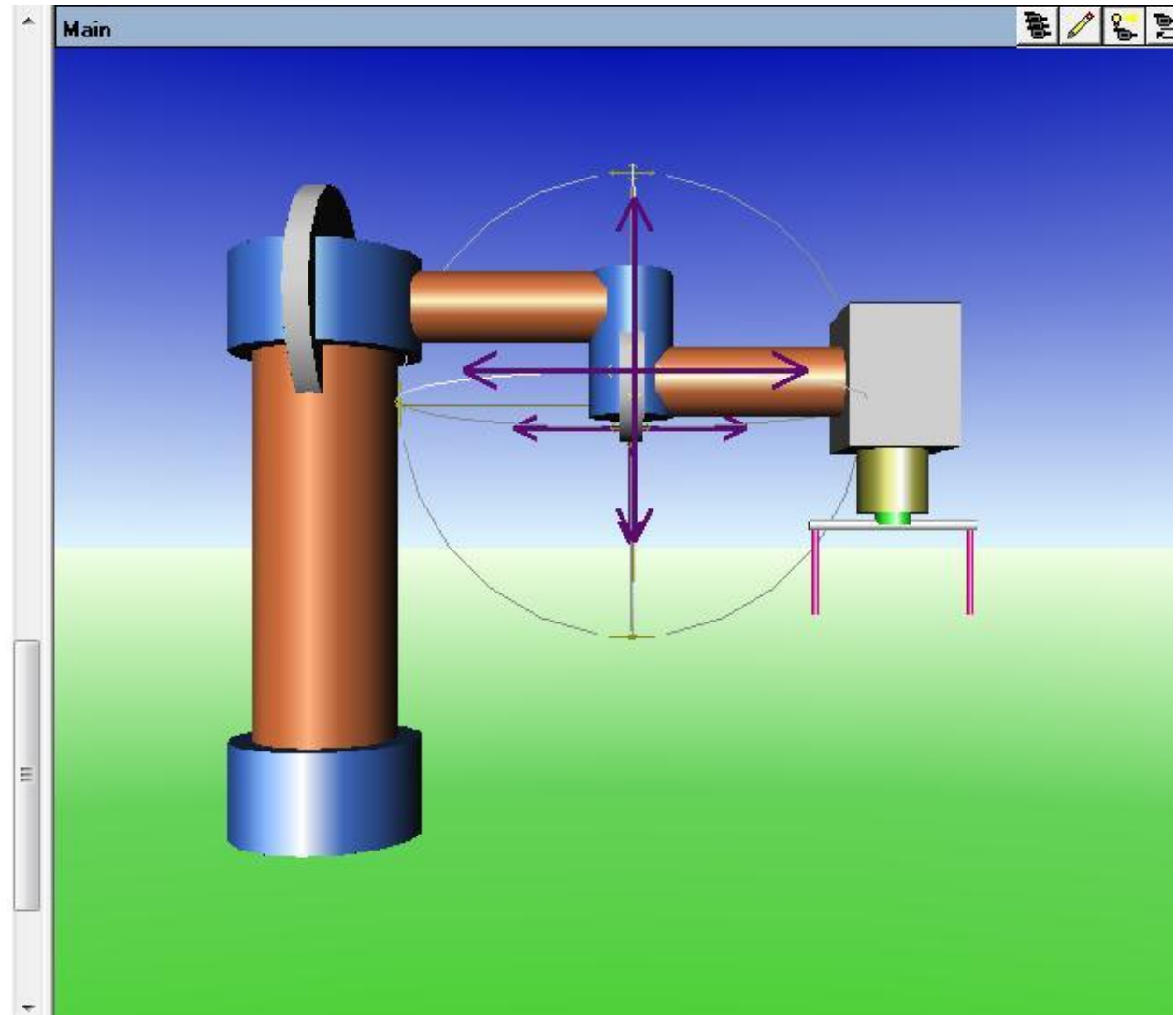# Rotation's hidden object for a1

Rotation's hidden object for a2

Axis of rotation for a1

Axis of Rotation for a2

EndEffector
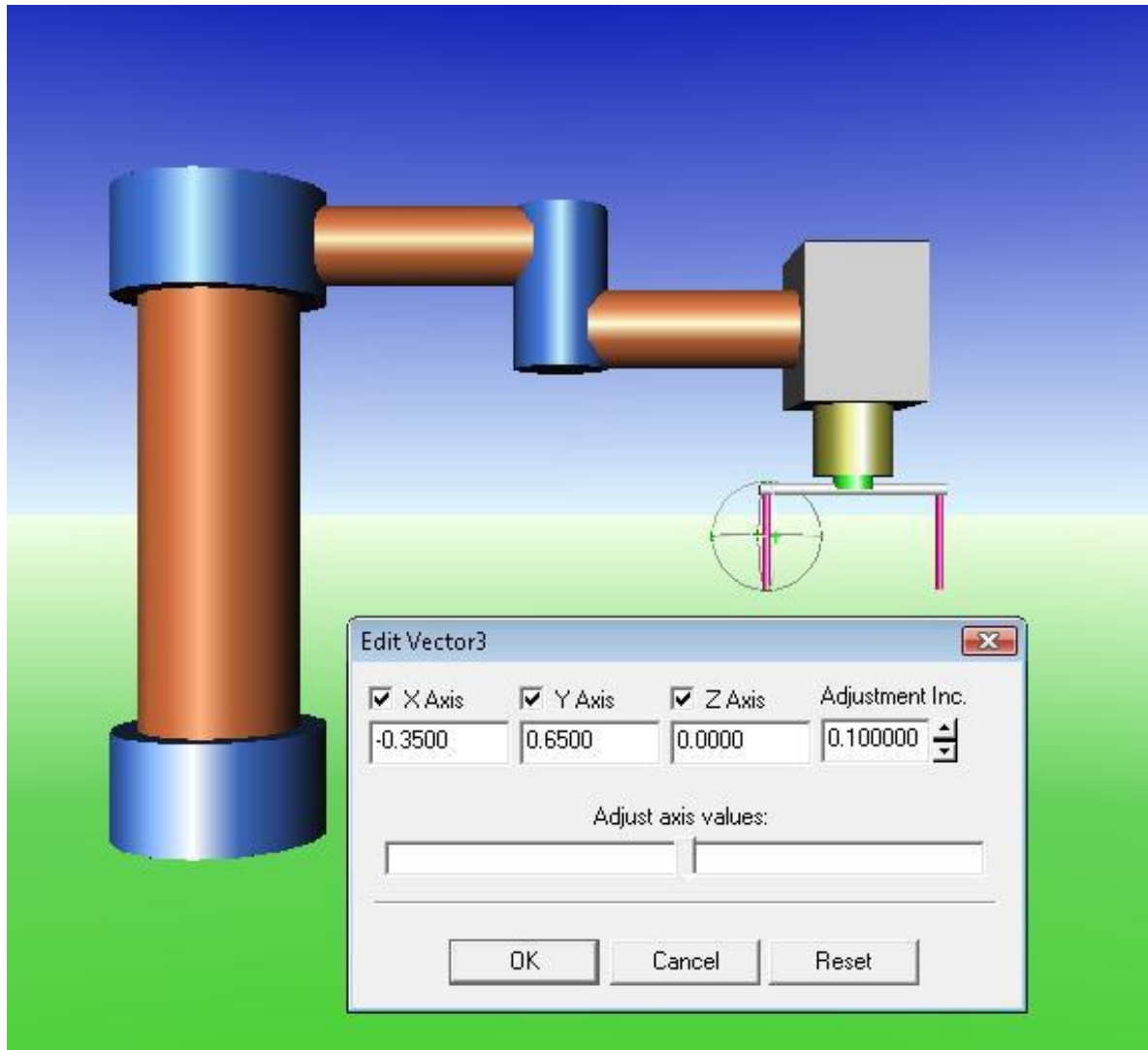
Controlling by commands

- **SCARA30 = vrworld('SCARA30.wrl');**
- **open(SCARA30)**
- **View(SCARA30)**
- **radian=T1*pi/180, radian=-T2*pi/180, radian=T4*pi/180;**
- **SCARA30.a1.rotation = [1, 0, 0, radian]**
- **SCARA30.a2.rotation = [1, 0, 0, radian];**
- **SCARA30.d4b.rotation = [0, 1, 0, radian]**
- **SCARA30.d4b.translation = [0, d4b, 0];**
- **EndV1=SCARA30.EndV1.translation;**
- **EndV2=SCARA30.EndV2.translation;**
- **x1=EndV1(1);**
- **x2=EndV2(1);**
- **y1=-.5*dist;**
- **y2=.5*dist;**
- **SCARA30.EndV1.translation = [x1, y1, 0];**
- **SCARA30.EndV2.translation = [x2, y2, 0];**