

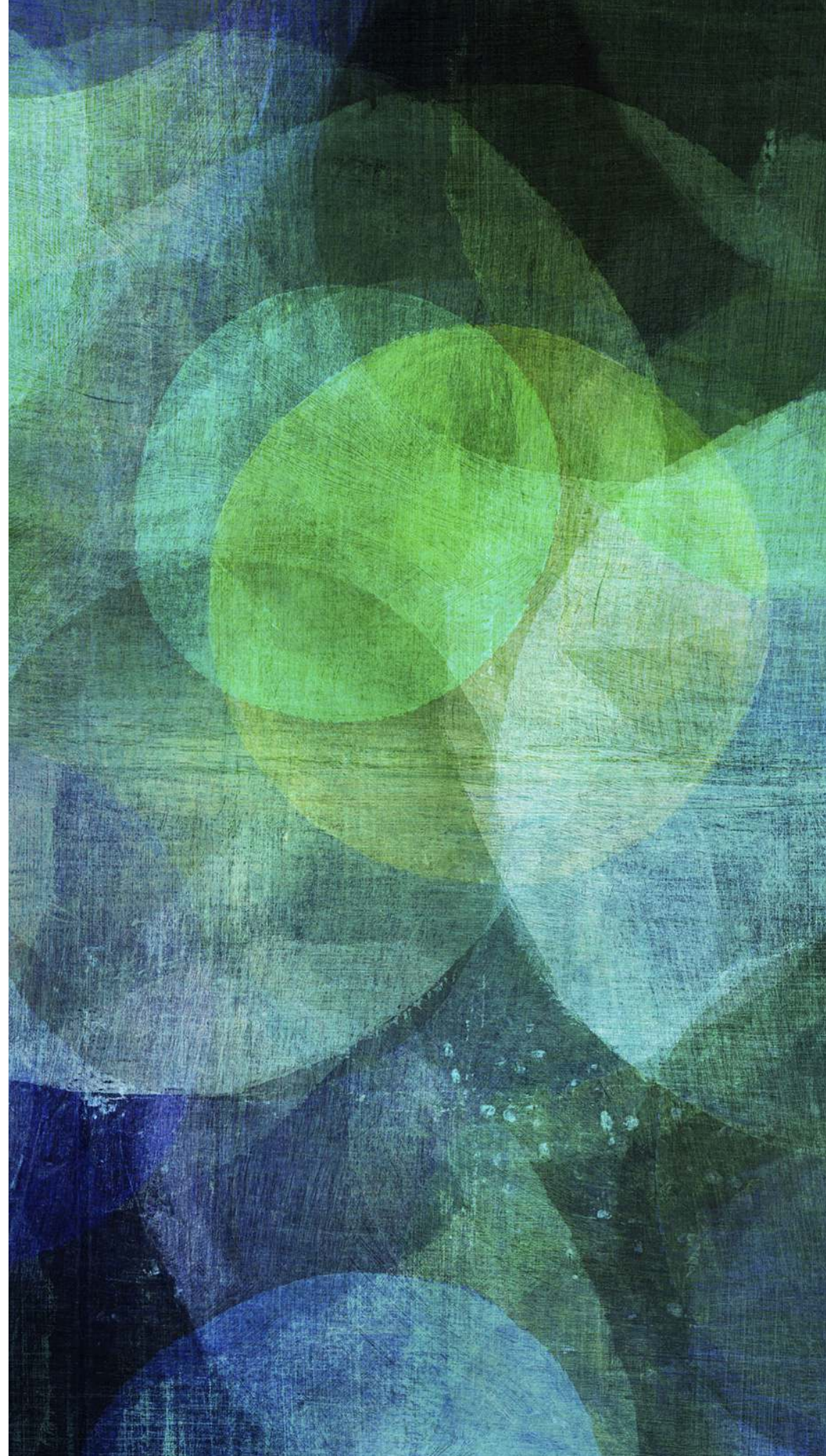


TVGS LESSON NIGHT

Animation and Rigging in Blender 3D

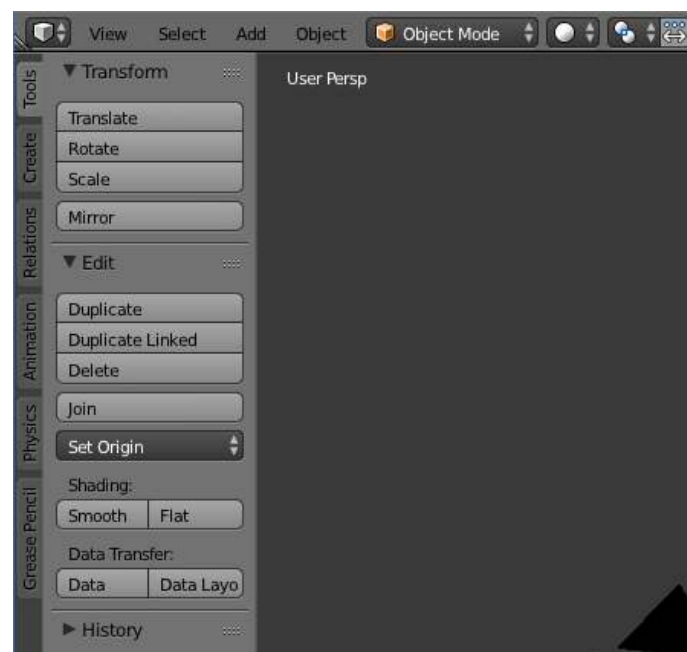
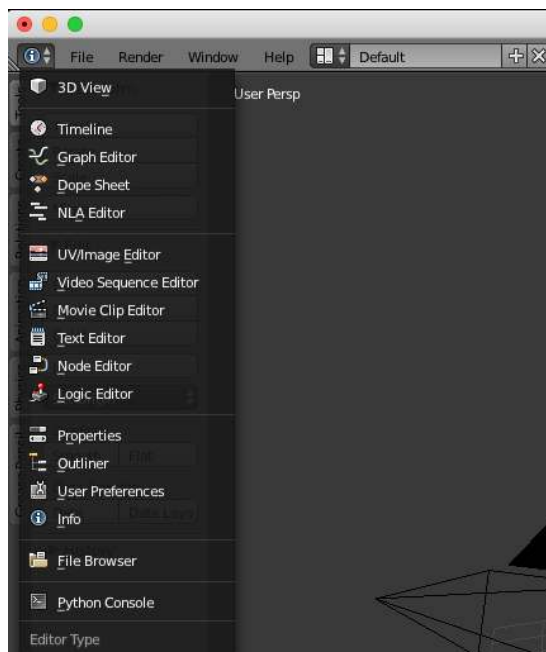
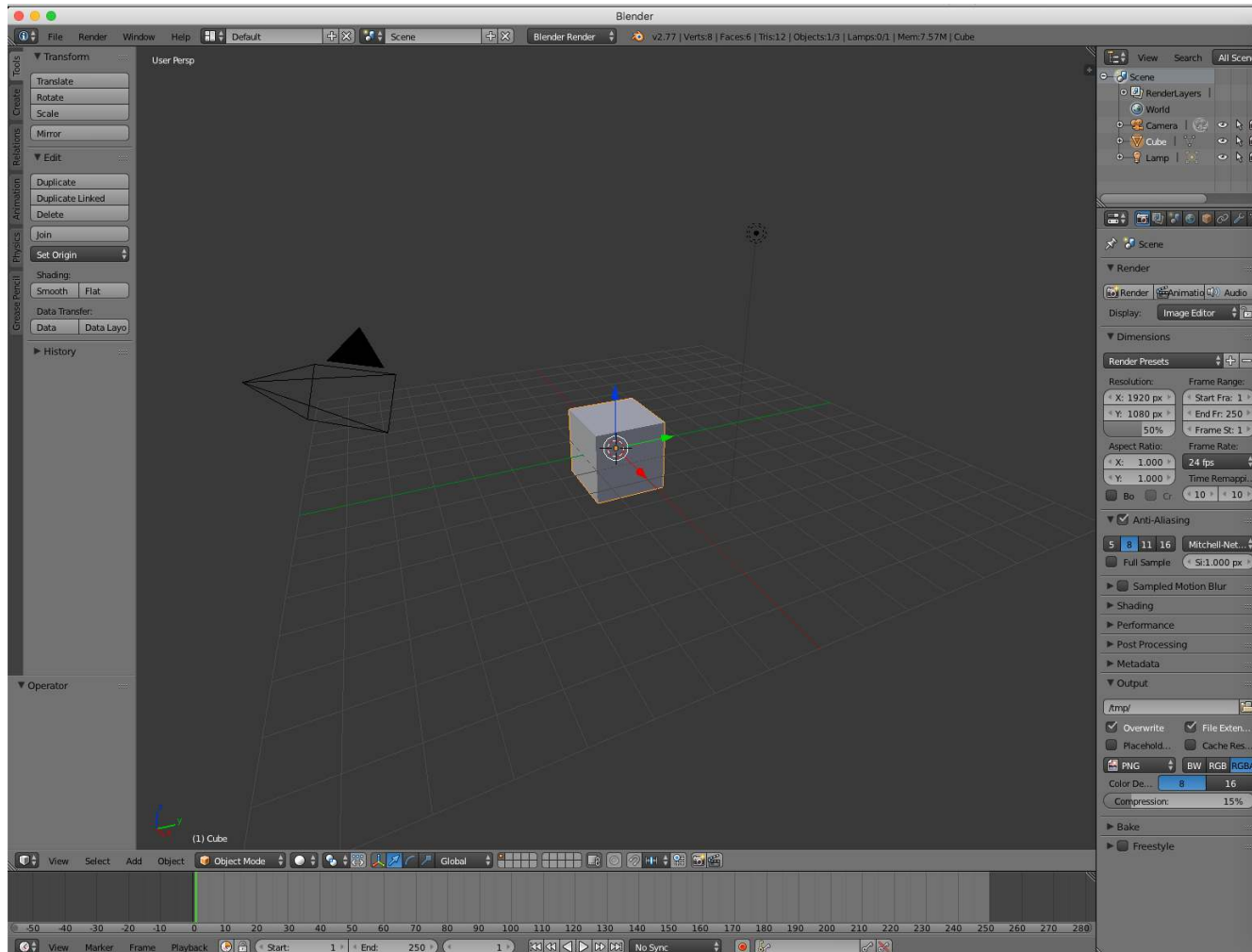
JASON HARLOW

AKA: spaceJASE
www.spacejase.com



BLENDER BASIC RECAP

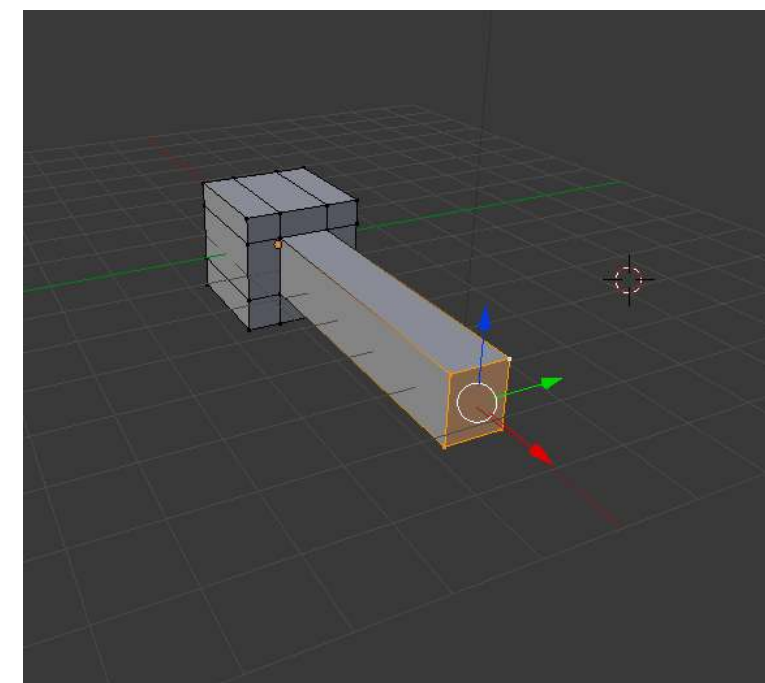
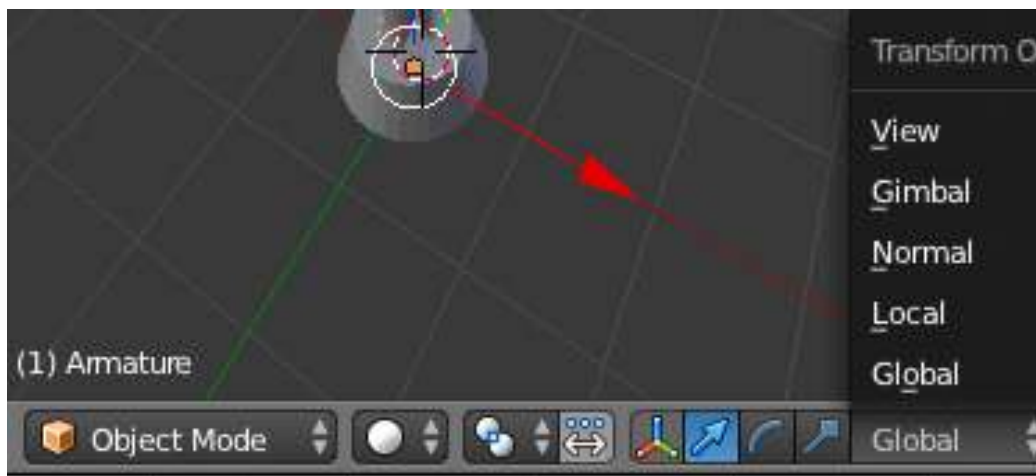
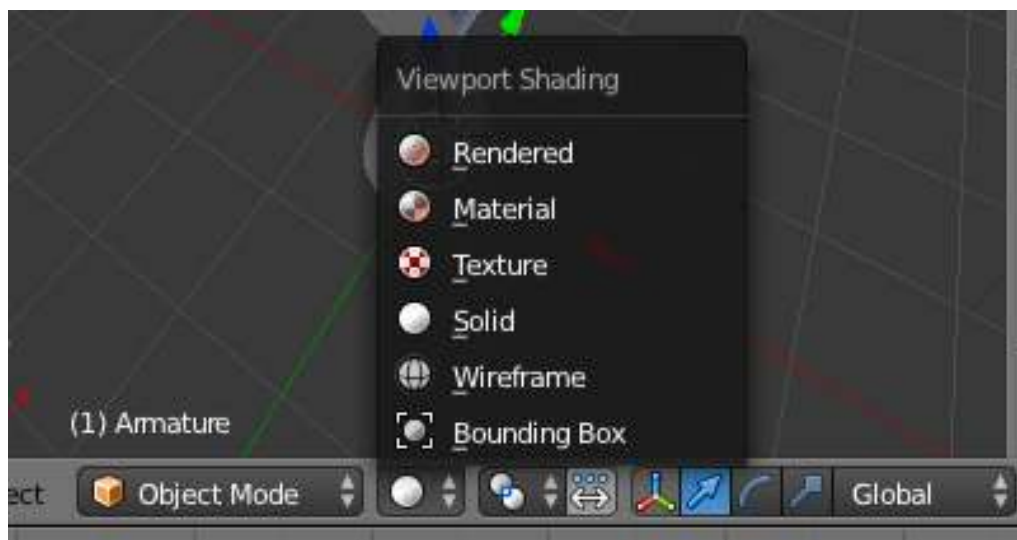
- Tumble = MMB
- Pan = MMB+shift
- Zoom = MMB +ctrl
- Select = RMB
- Translate (grab) = G
- Rotate = R
- Scale = S
- +XYZ = force axis constraint
- shift+XYZ = exclude axis
- LMB = accept action
- RMB = reject action

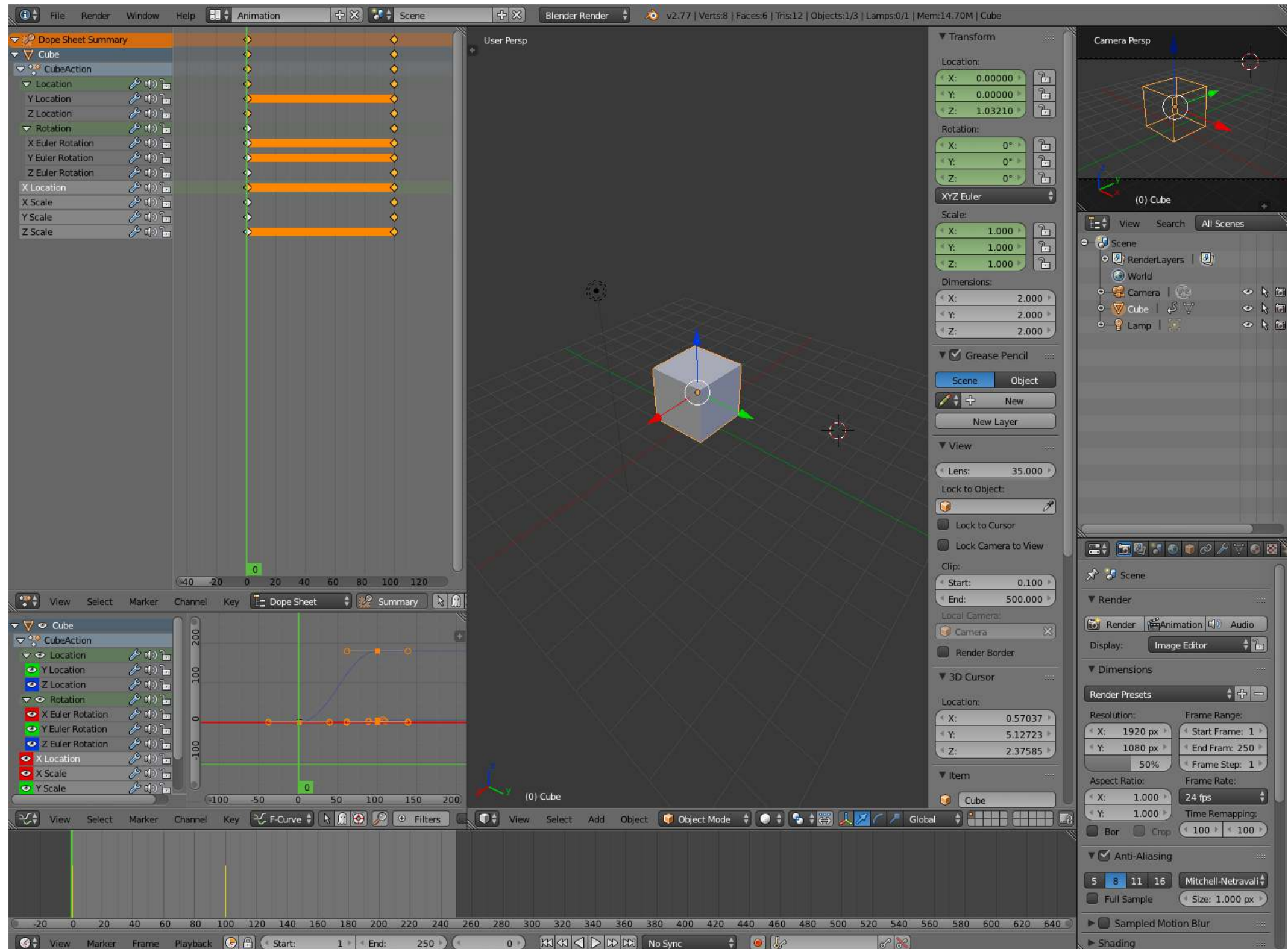


BLENDER BASIC RECAP

.....

- Object mode
- Edit mode
- Pose mode
 - toggle = Tab / Ctrl+Tab
- Extrude = E
 - (remember that one)
- Slice = ctrl R



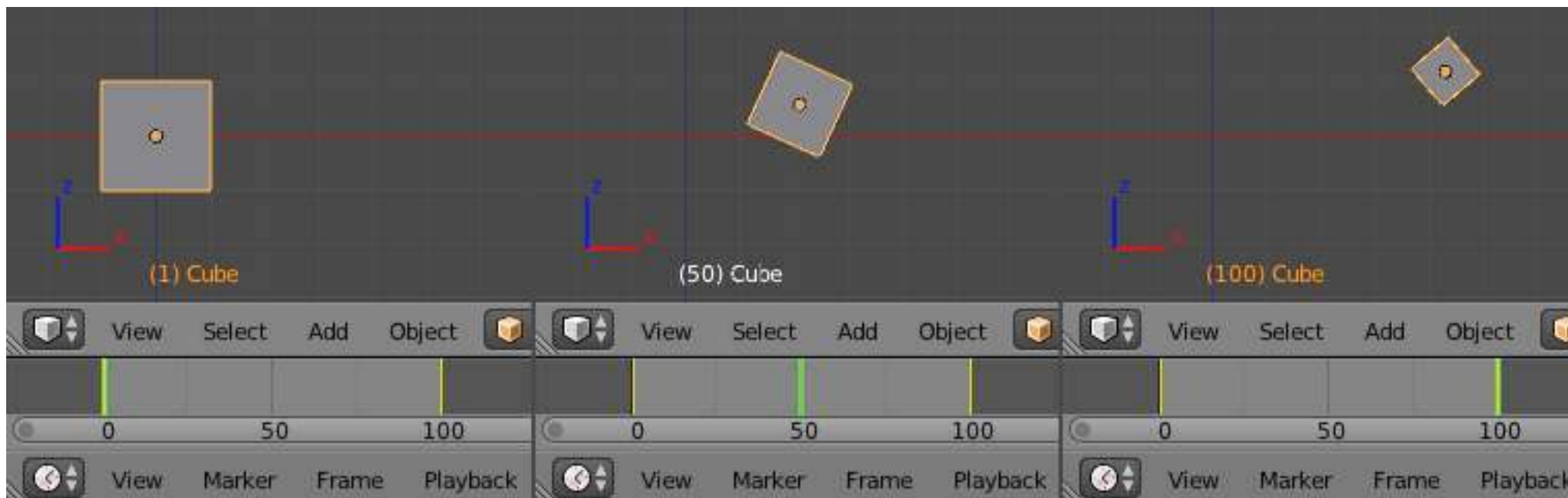
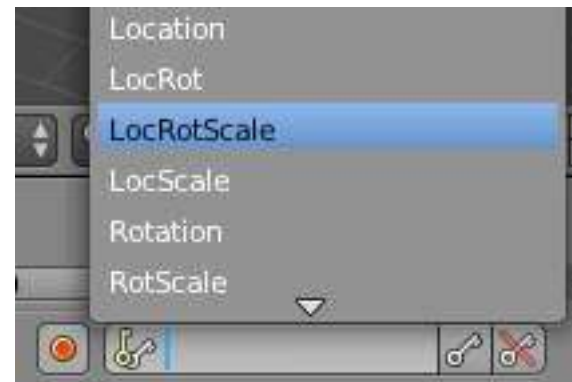
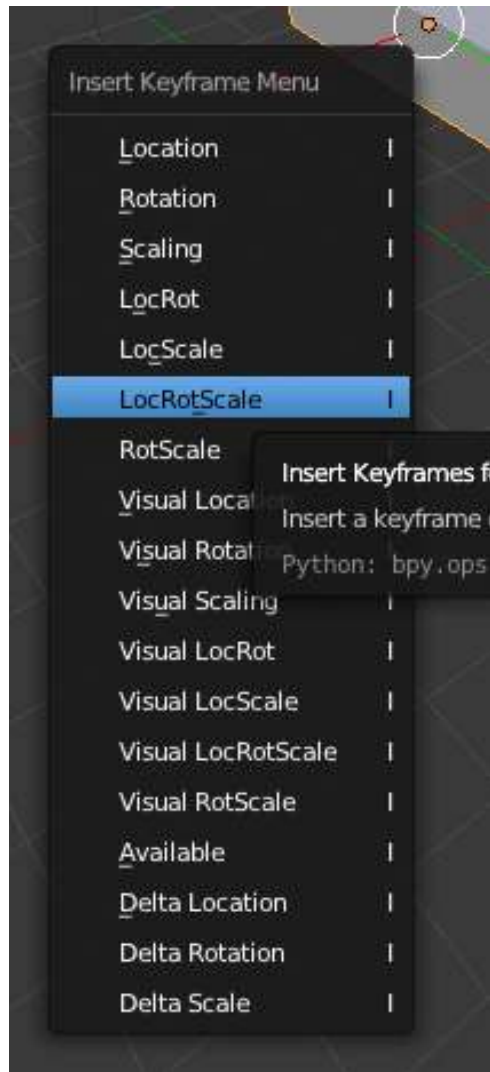


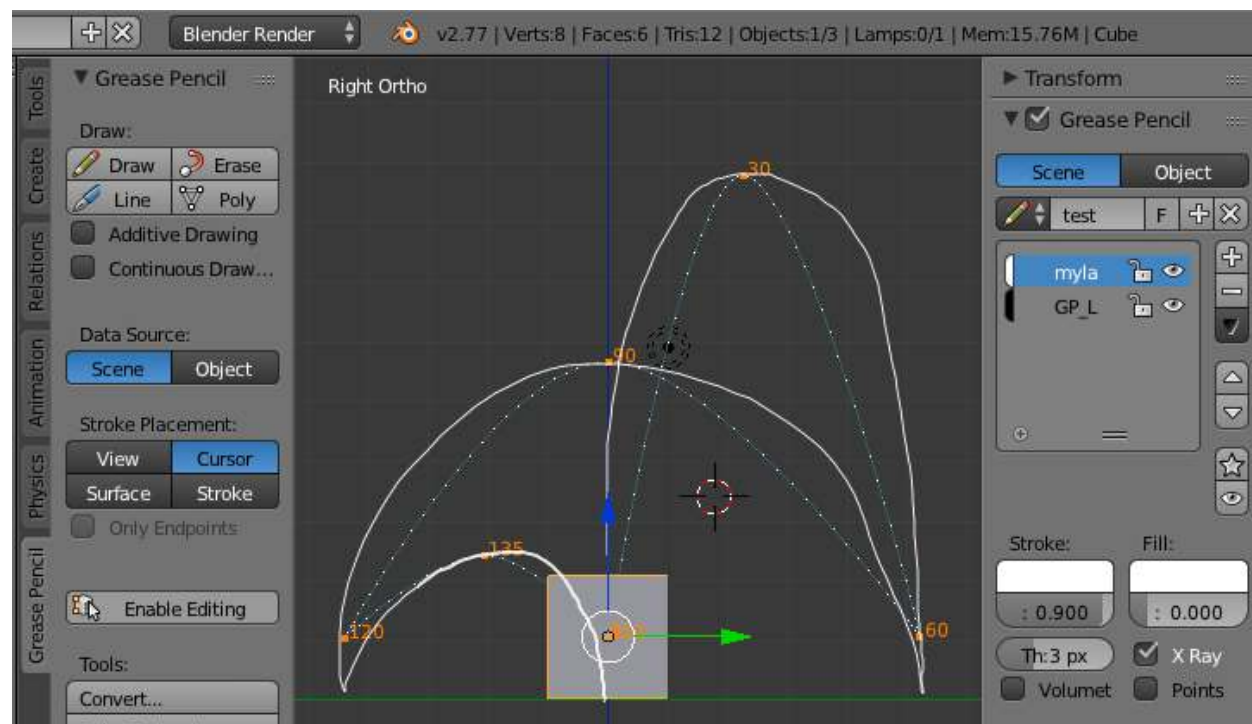
ANIMATION

dope sheet / curves / timeline

SETTING KEYFRAMES

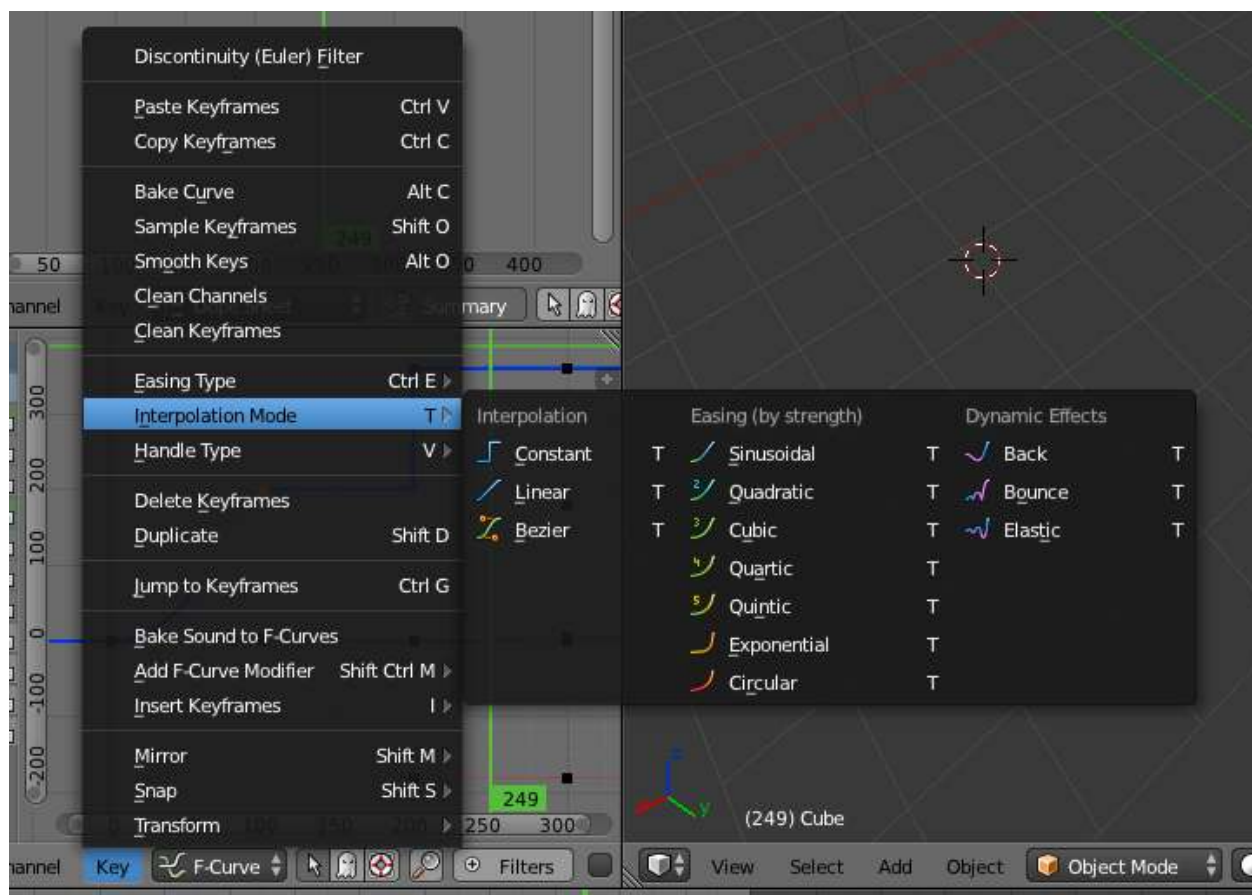
- i = set key
- alt + i = remove key
- Automatic Keyframe!
- Keying “sets”
- Set timeline start/end
- Alt + a = play animation

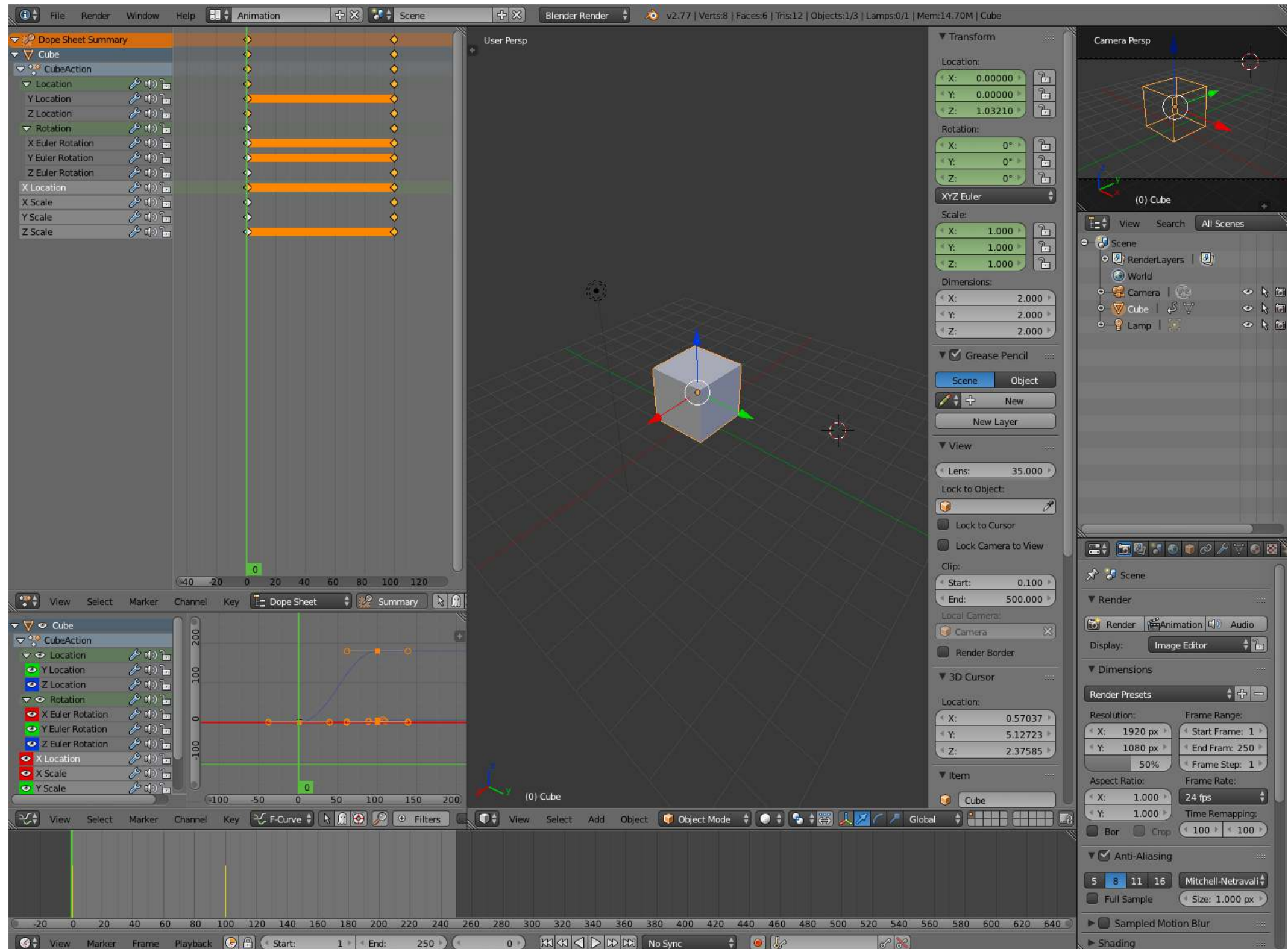




MODIFYING ANIMATIONS

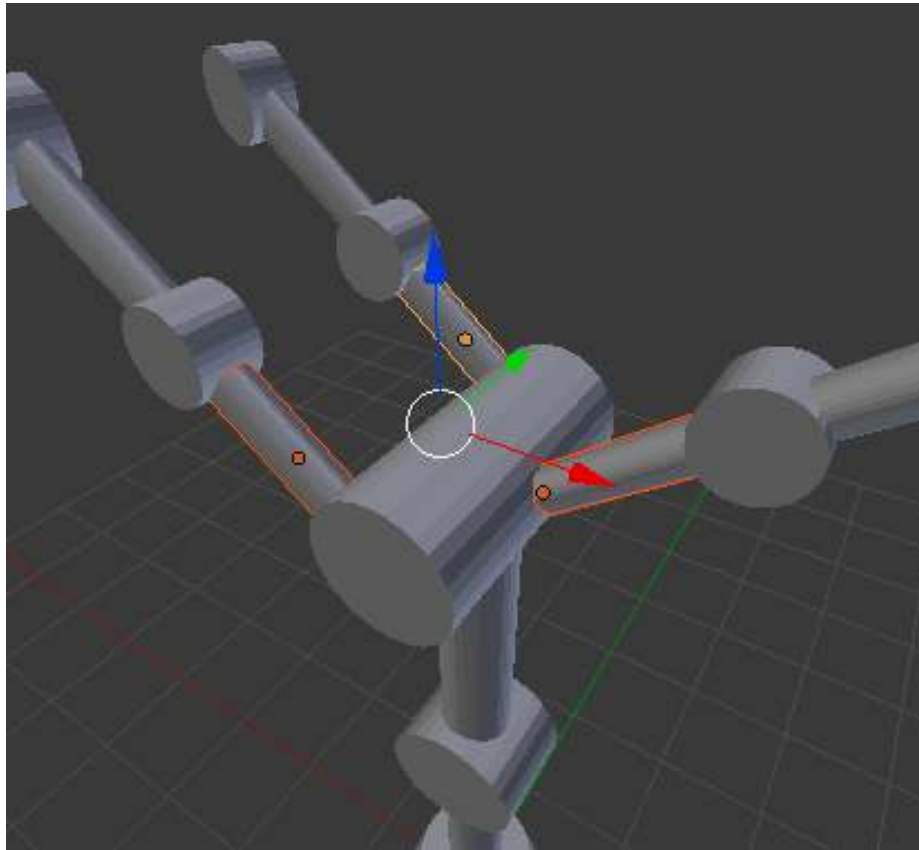
- Grease Pencil
- Motion Paths
 - (properties > object)
- timing (dope sheet)
- spacing (curves)
- V = handle type
- T = interpolation (oooh bounce!)
- Extrapolation Mode
 - (channel > extrapolation)
- Markers (why?)





RIGGING

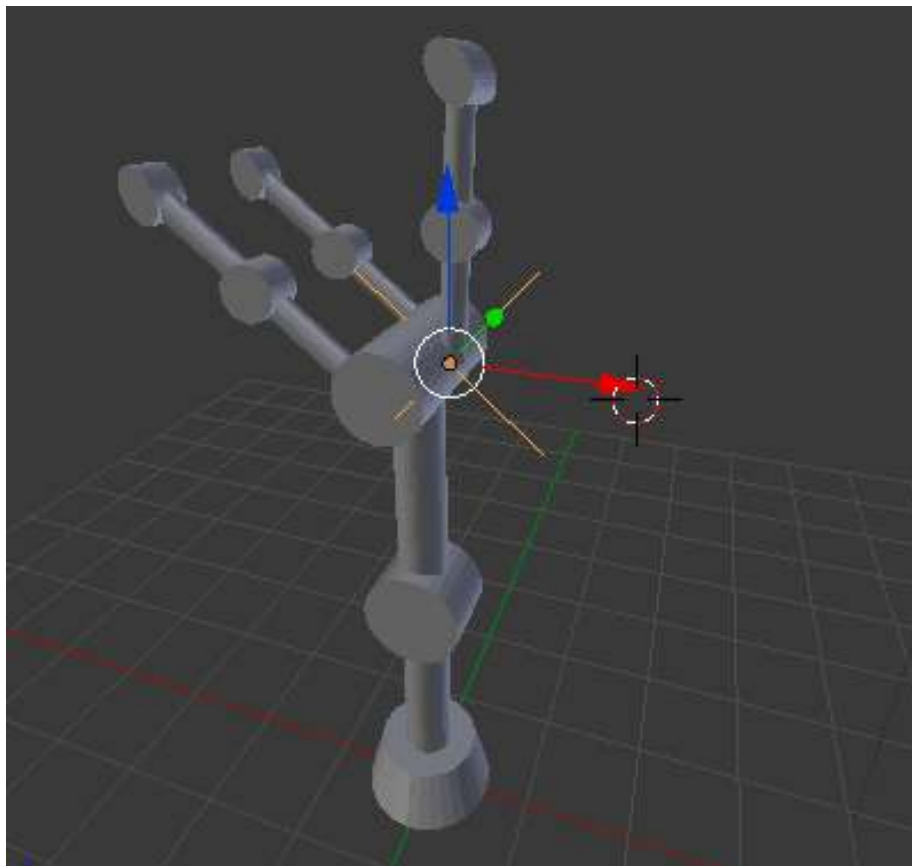
parenting / empties / armatures / rigging / weighting

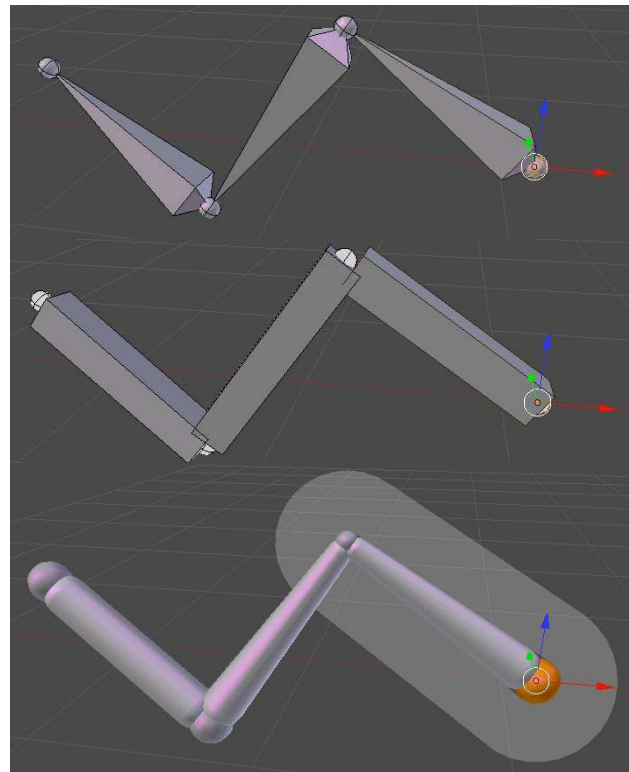


RIGGING: SIMPLISTIC(?)

.....

- Ctrl + p = Parent
- Alt + p = Unparent
- Ctrl + j = Join
- Move pivot
- Empty Nodes

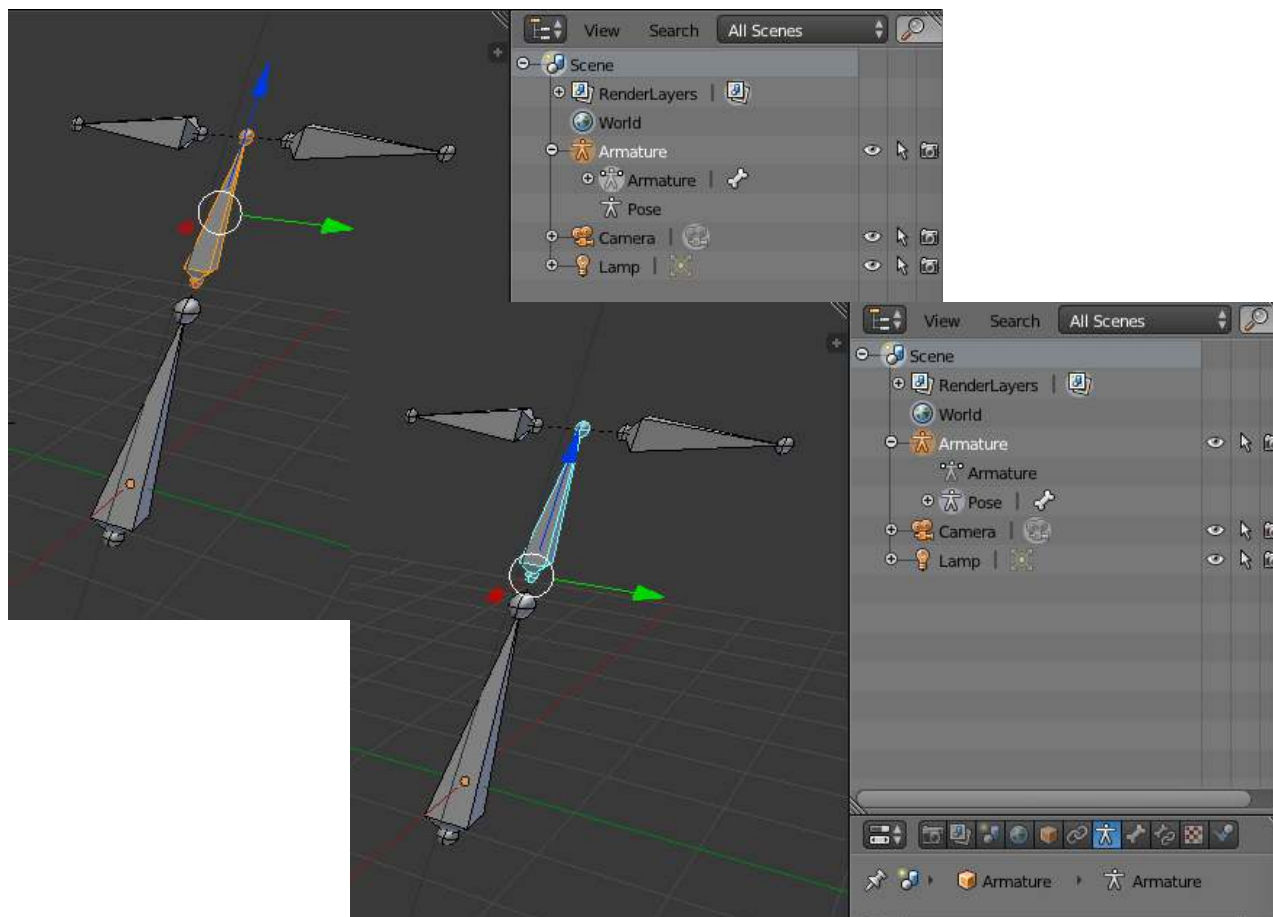


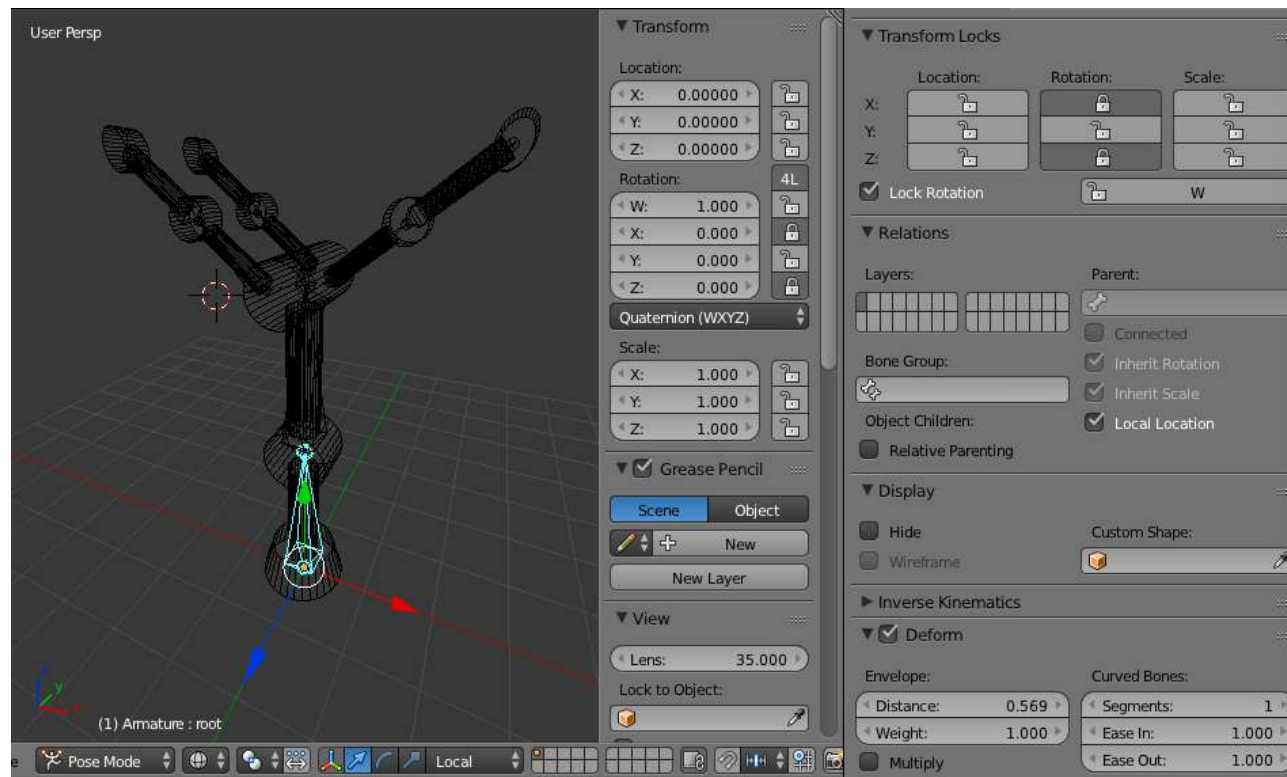


RIGGING: DEM BONES 1

➤ Bones

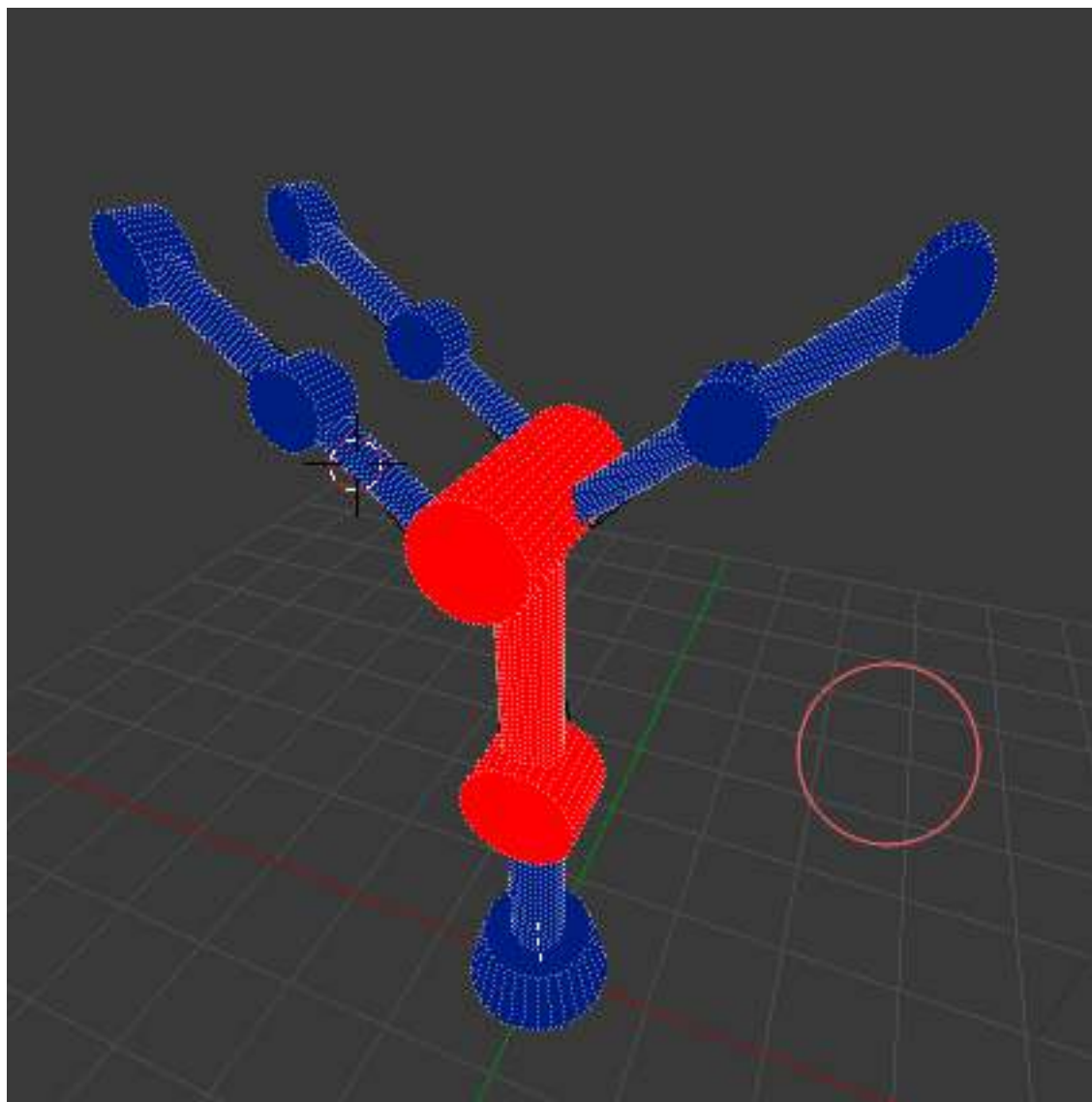
- Add > Armature > Bone
- Edit mode > extrude (E)
- Oh, SNAP!
- Reposition Bones = Unparent > Disconnect
- Shift + d = duplicate
- Ctrl + m (+XYZ) = mirror (axis)
- W > subdivide





RIGGING: DEM BONES 2

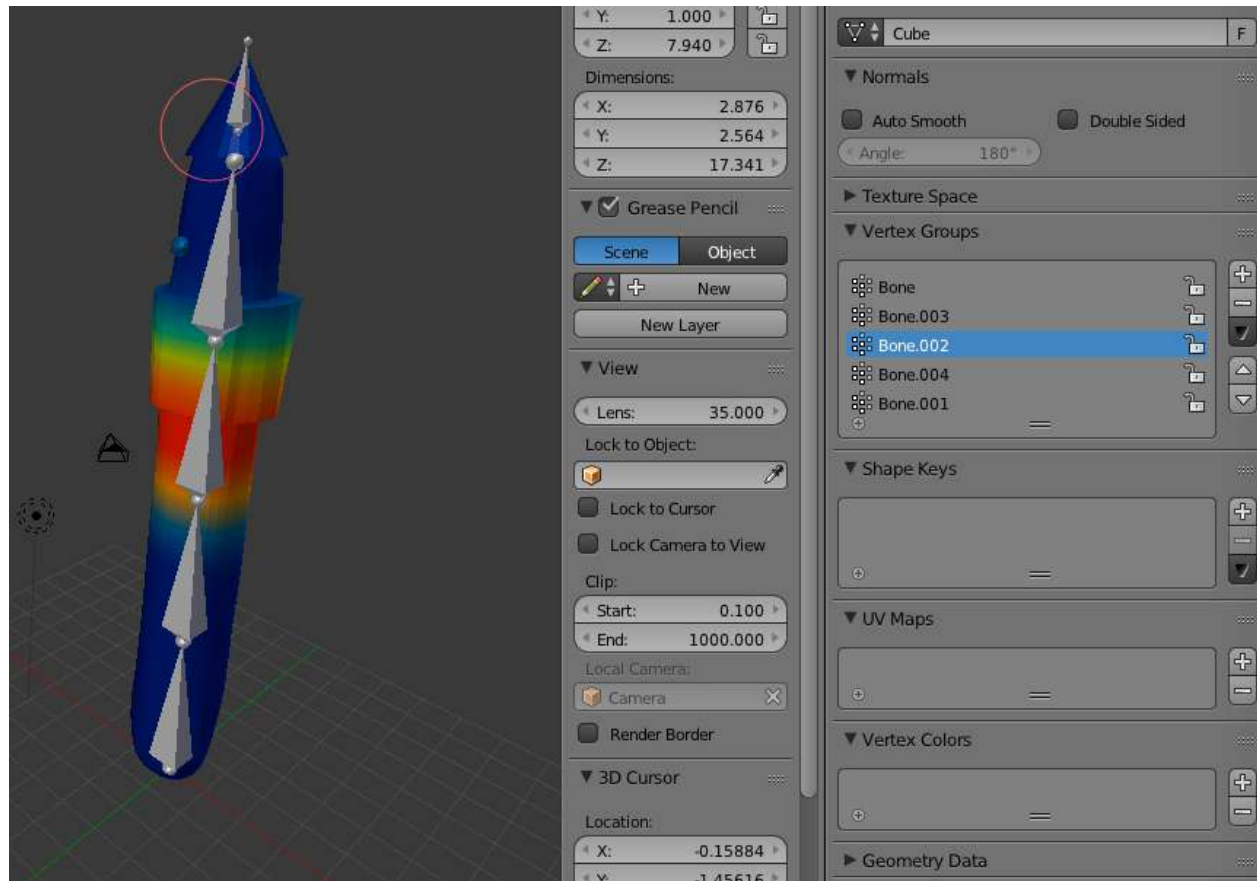
- Bones
 - Edit vs Pose
 - (Tab / Ctrl + Tab)
- Transform locks
- Local transforms



RIGGING: WEIGHTING

.....

- Rigid Weighting to an armature
 - Select mesh
 - Select Armature
 - Ctrl + p
 - Armature Deform
 - Empty Groups
 - Select mesh
 - Ctrl + Tab = Weight Paint
 - Edit mode, then select vertex + L = select all?



RIGGING: WEIGHTING

.....

➤ Soft Weighting to an armature

➤ Select mesh

➤ Select Armature

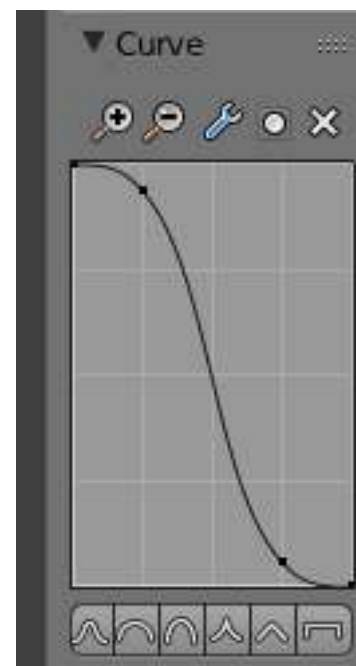
➤ Ctrl + p

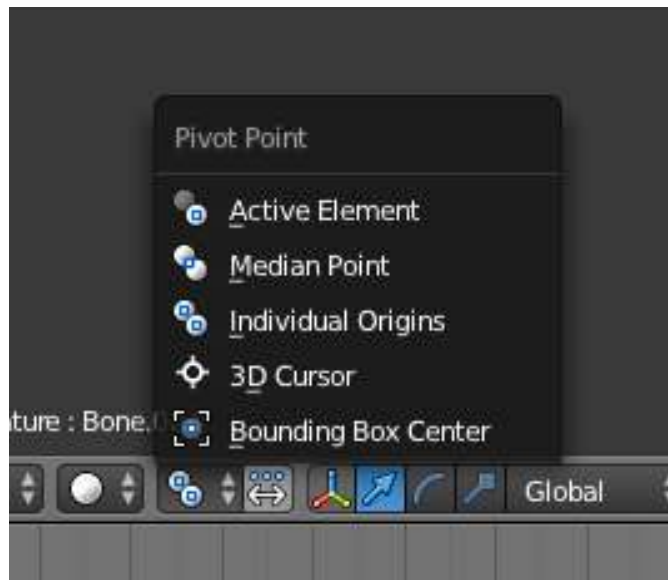
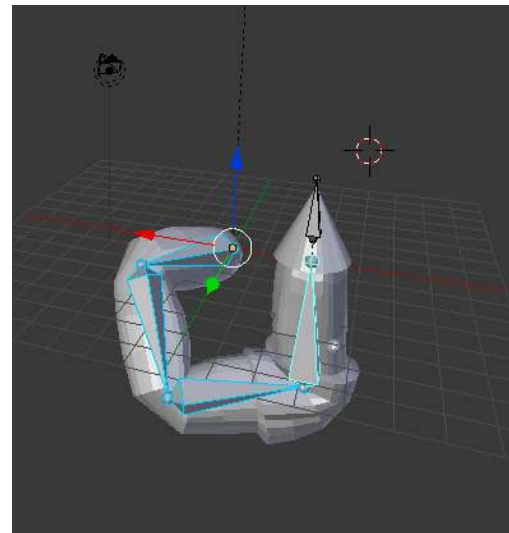
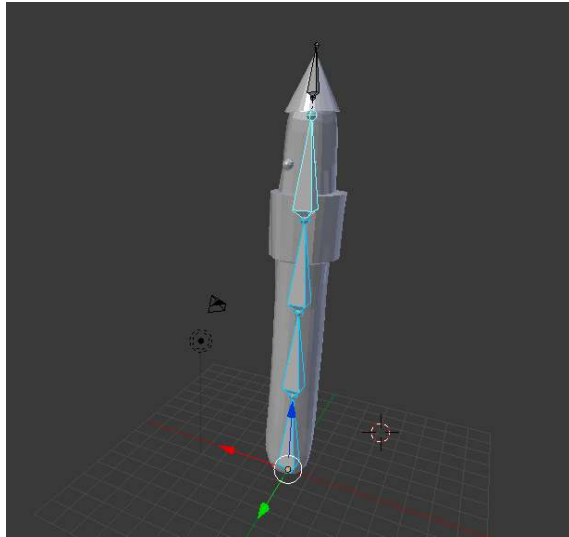
➤ Armature Deform

➤ Auto-weights

Select mesh

Ctrl + Tab = Weight Paint



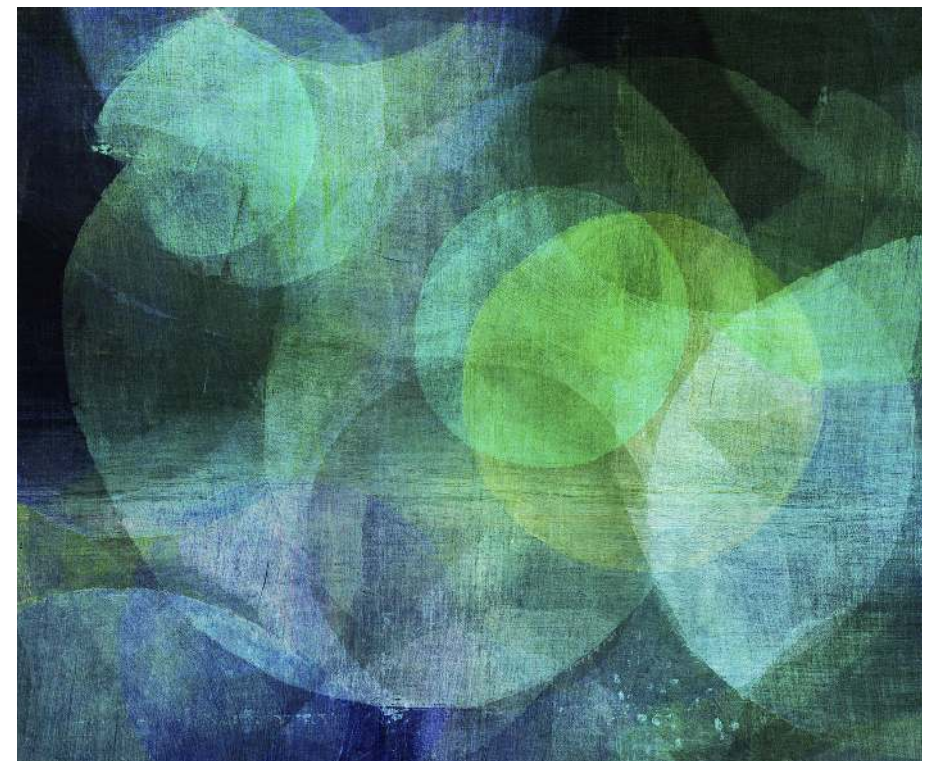
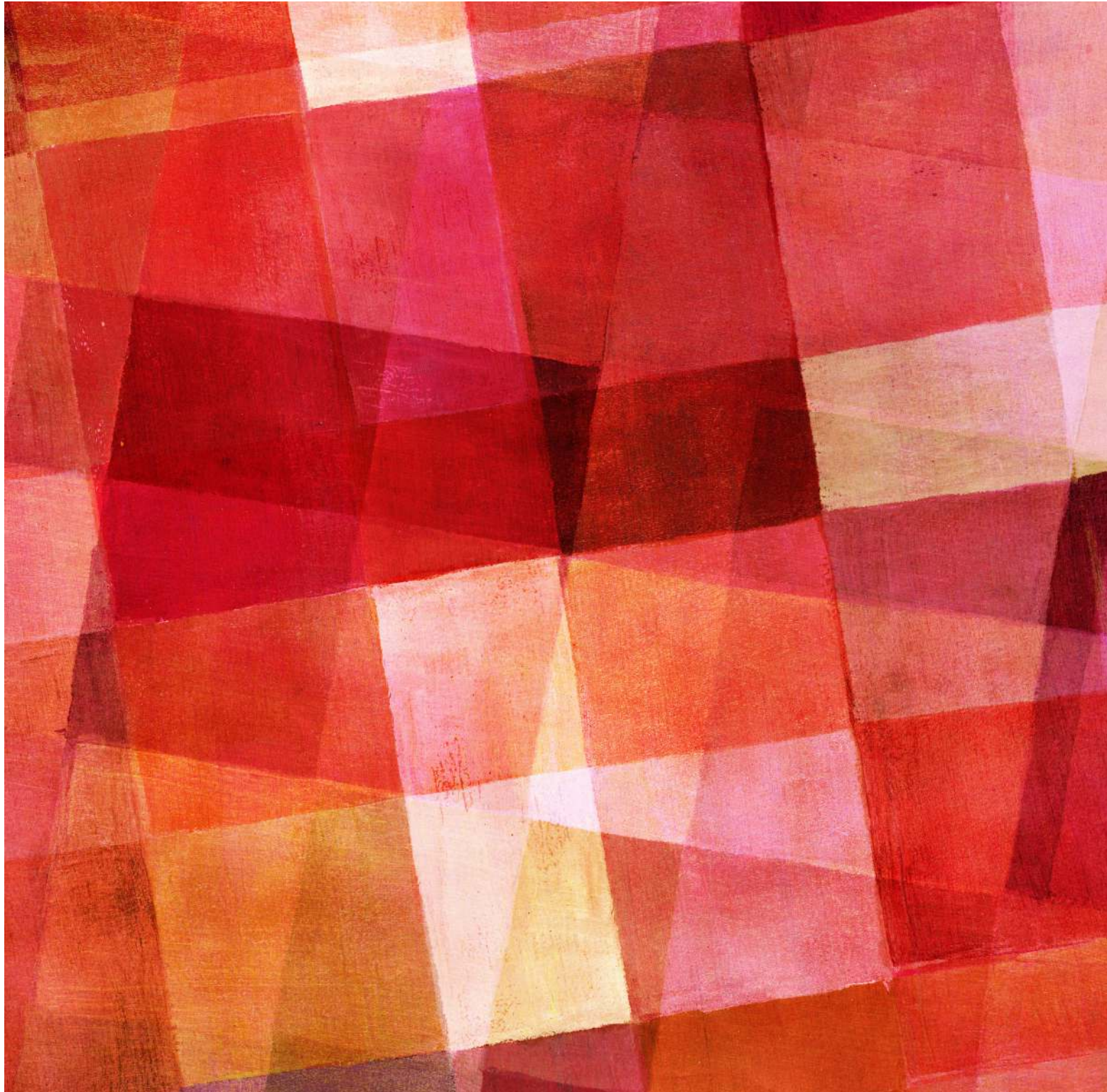


RIGGING: FK / IK

-
- Pose mode
- Ctrl + . = select hierarchy
- WT FK

- Edit mode
- extrude and detach a bone at
END of desired IK

- Controls = change display of
bone (curve or object)



THE END