

# Art 384: Introduction to 3D Animation

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Lecture 15

# Schedule

- Roll
- Assignment D
- Meet Rikki and Frank

# Assignment D

- Make an animation with Rikki and Frank
- Make a set for them to jump around in
- Make a backstory
- Not over 30 seconds

# Meet Rikki



# Rikki is rigged

- You don't move Rikki by selecting her parts
- Use the controls
  - **Animate Rikki by animating the controls**
  - Motion not created via controls is a mistake.
  - There are layers: "controls", "skeleton" and "display"
    - Stay on the "controls" layer.

The blue circles are the controls

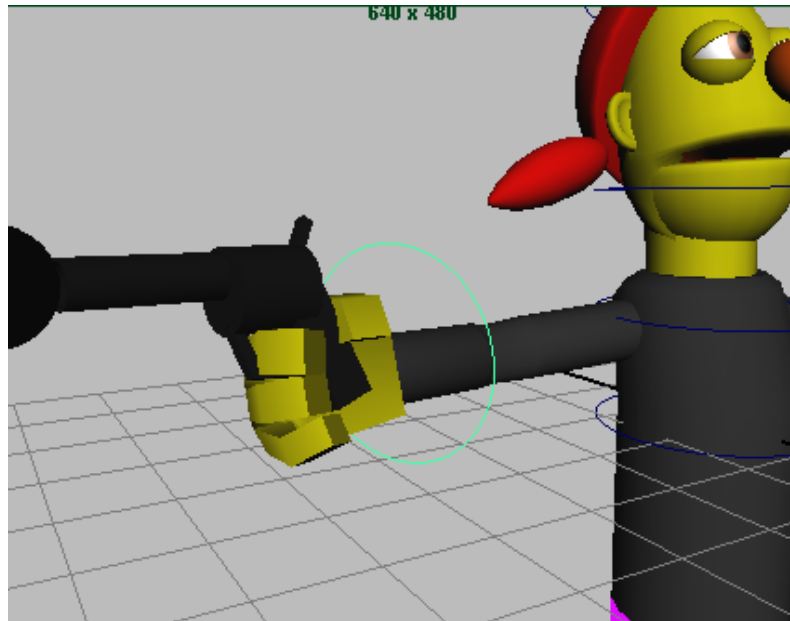


# A stack of torso controls

- If you select a lower one, it moves the ones above
- DO NOT use a selection box; select one control at a time.
- Control of the mouth is pretty free
  - ! : you can screw it up
- Move entire body by moving waist.

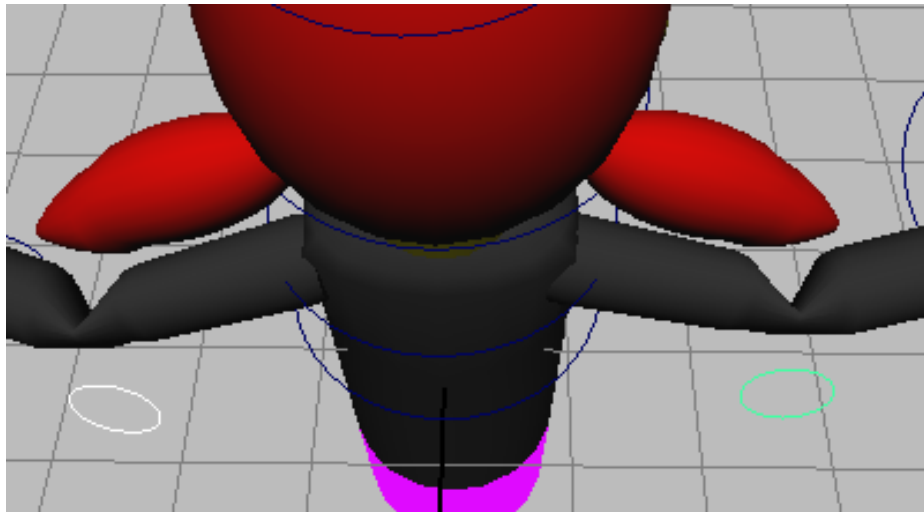
# Arm Controls 1

- Use the hand controls to place the hands
- The arms will follow the hands
- Twisting the controls turns the hands



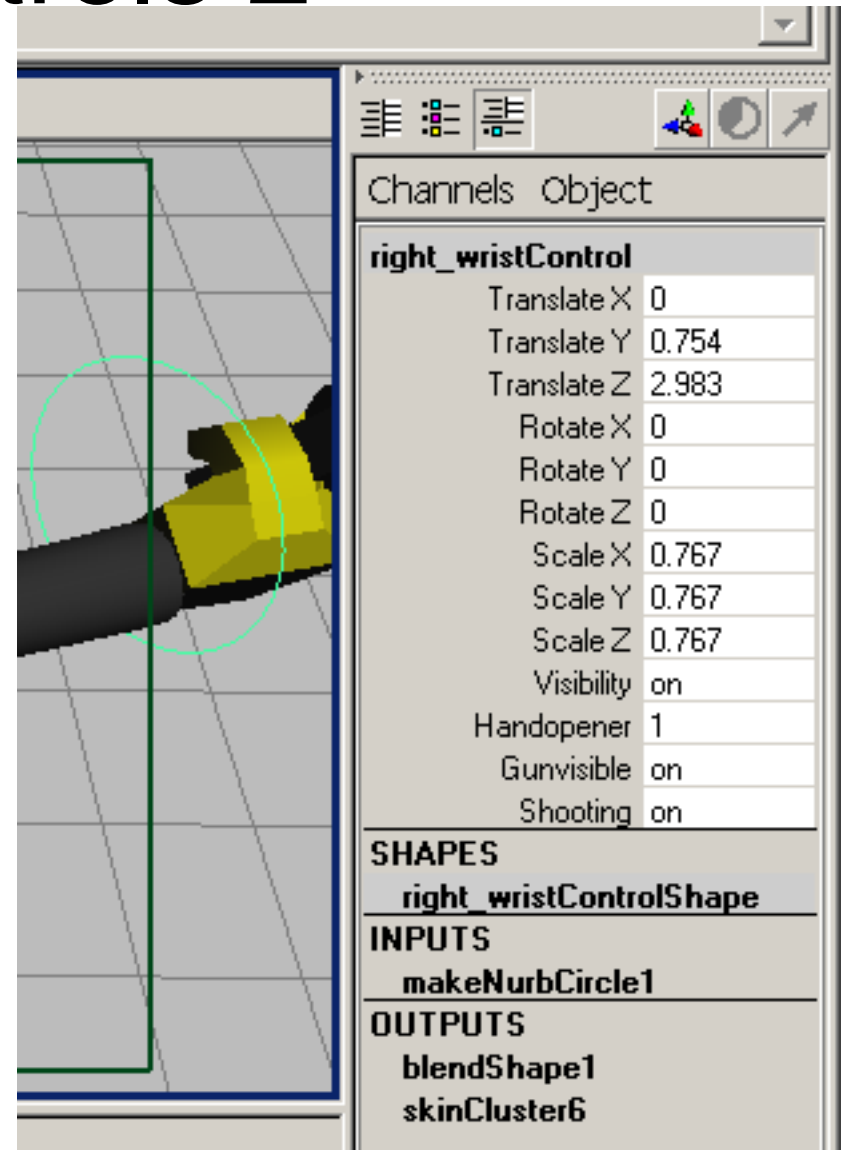
# Arm Controls 2

- **Pole vectors** determine the plane through shoulder, elbow and wrist.
- Arm animations must be done by animating hands **and** control vectors.
- People who ignore pole vectors are made sad later.



# Arm Controls 2

- The hands open and close
- Controlled via an extra attribute, "Handopener"
- This does not release the gun.

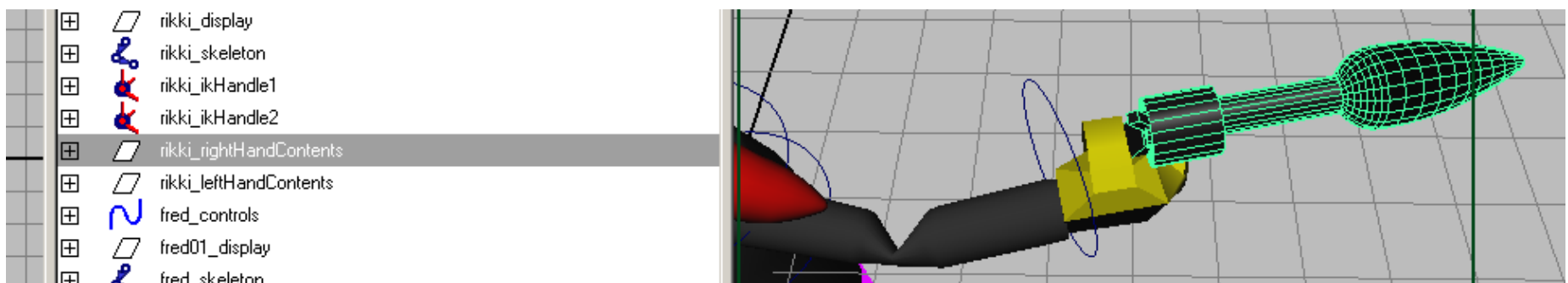


# The Gun

- It's almost impossible to animate "carrying"
  - but it's really easy to attach things
  - but you can't animate how the rig is set up (tiny white lie)
  - how do you pick up stuff?
- Rikki has groups attached to her hands
  - she is "holding" what's in the group
  - make one copy that is held, one not
  - there is a "gun visibility" attribute

# the other hand has a donut

- there are two hand groups in the outliner
- put what she needs to carry in there.
- control the visibility of those groups by animating hand-controller's attributes.
- You do not have to use the gun or the donut in your animation.



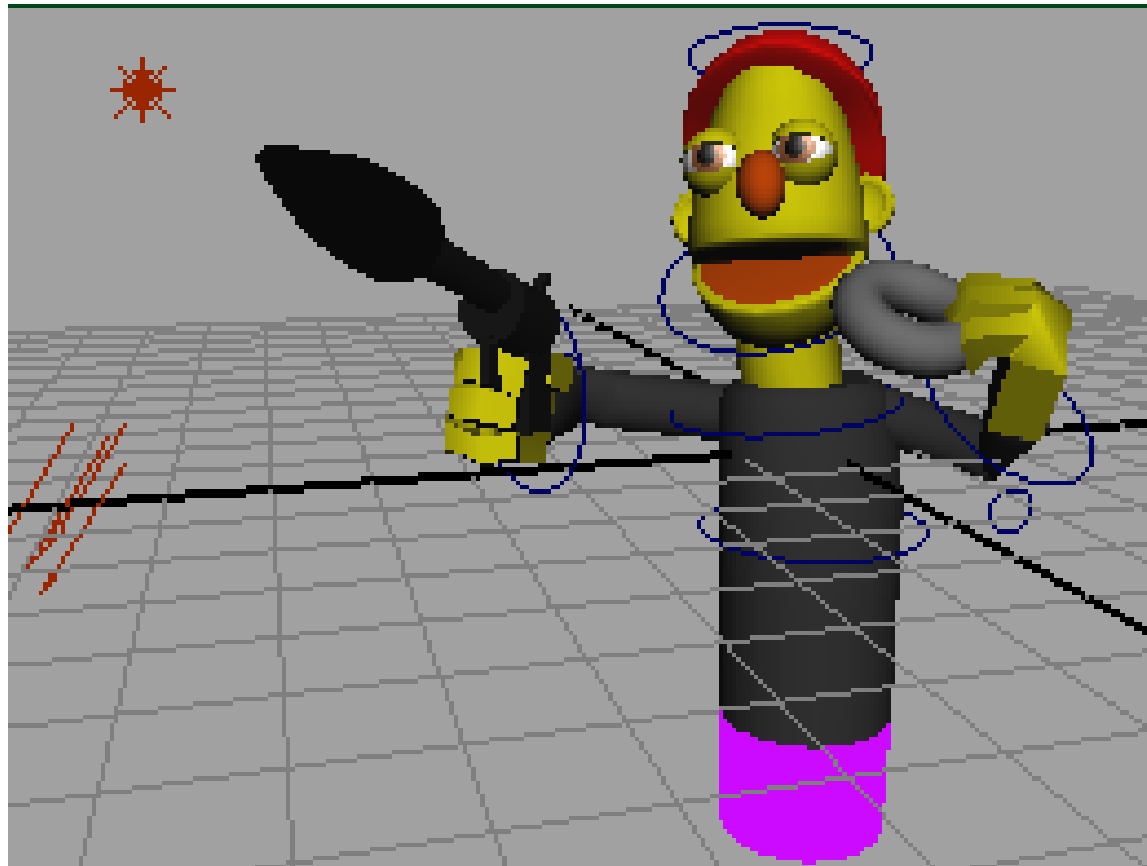
# Rikki has no legs

- So, she floats everywhere
  - her movements should imply legs
- She has a purple part instead
- Do not render the purple part
  - one letter grade off
  - keep it off-camera
  - I mean it
  - like Tom Cruise's bald spot
  - Wal-Mart will not stock you

# Rikki's face is not rigged

- It is possible to animate her face: DON'T
  - won't help your grade
  - adds lots of complexity
  - you've got enough to do
- Convey emotion with
  - head motion
  - torso motion
  - camera work

Fred is Rikki with no pigtails



# Animating the Camera

- Use only jump cuts
  - the fewer, the better
- Steadycam work in CG is the mark of the noob.
  - also, it's more work
  - also, you'll screw it up
  - also, it obscures what you're doing
  - I have many, many other objections

# The Set

- Do a storyboard first
- Build the set **AFTER** you storyboard
  - thereby determining the shots
  - which are not steadycam shots, of course
- Don't forget to light the set
  - put the lighting in the storyboard
- Don't forget that you can animate the lights

# Good cinematography

- Shows the situation
- Shows the space
- Sets the pace
- "Why don't we just-- not show that?"
- Cinematography is technically trivial.
- Conceptually, it's at least half the work.
- It separates the children from the grown-ups

# Set Suggestions

- Shadows are awesome for hiding things
  - like the lack of props
- Match Rikki's level of detail, which is real low