

Question:

How do I create curves from the post infinity cycle? - Zaipha – the forums

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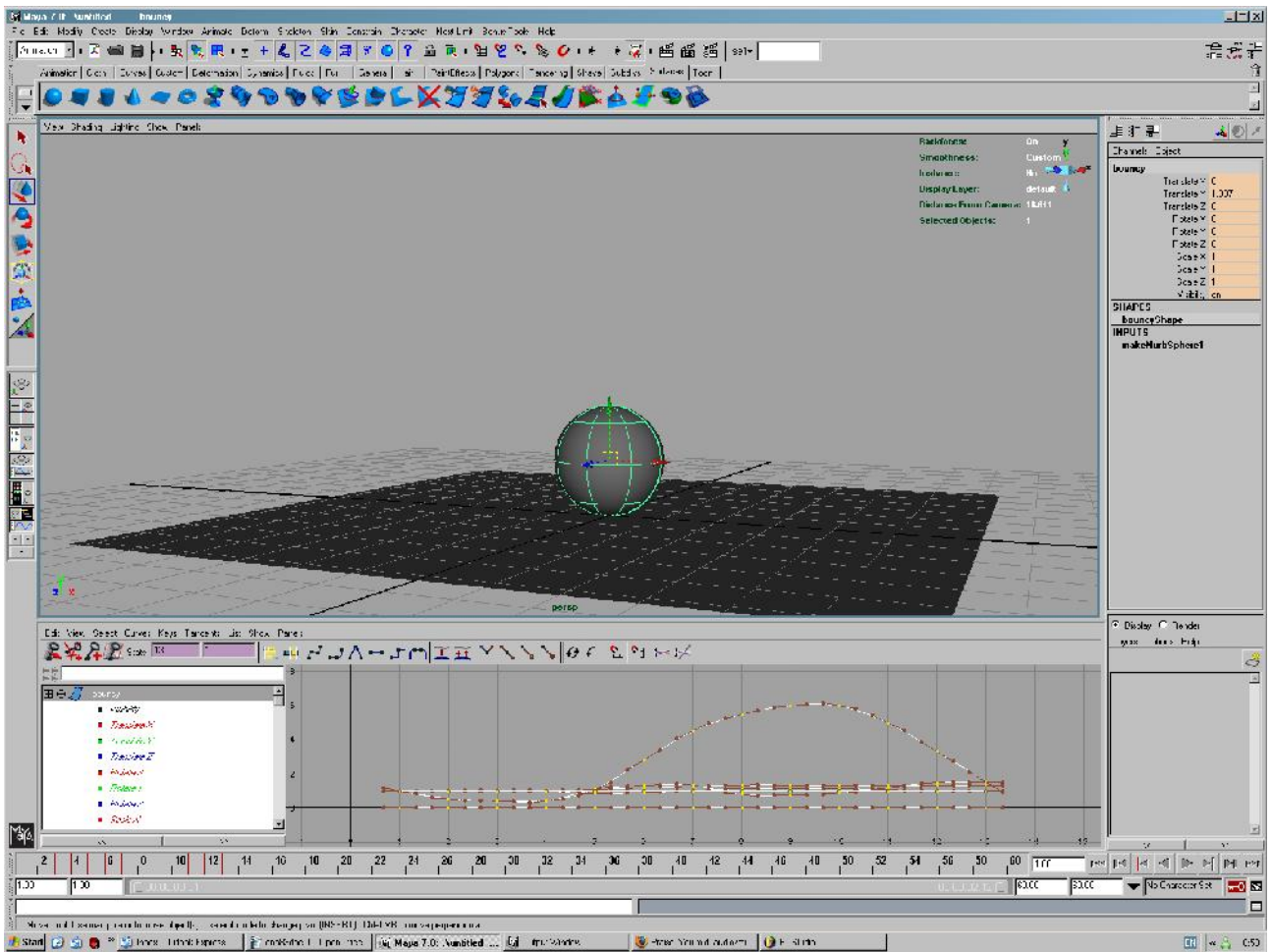
Oh, the joys of the graph editor, eh? Setting up an animation to cycle is really quite nice, isn't it? Saves all of that tedious mucking about with coping and pasting keys, that's for sure. You just open up the graph editor, select your object and then after selecting all of the keys go to the curves menu and apply post infinity > cycle. Okay, you can't see them until you go into the view menu and click infinity but when you can, what a joy to behold. Curves, beautiful and yet at the same time dotted. A bit like an archetypal blonde.

But “Hold your horses,” you say, “I know I said I wanted this, but I've changed my mind. I want to make it slow down and stop from frames 201 to 300. I'm stuffed now, aren't I?”

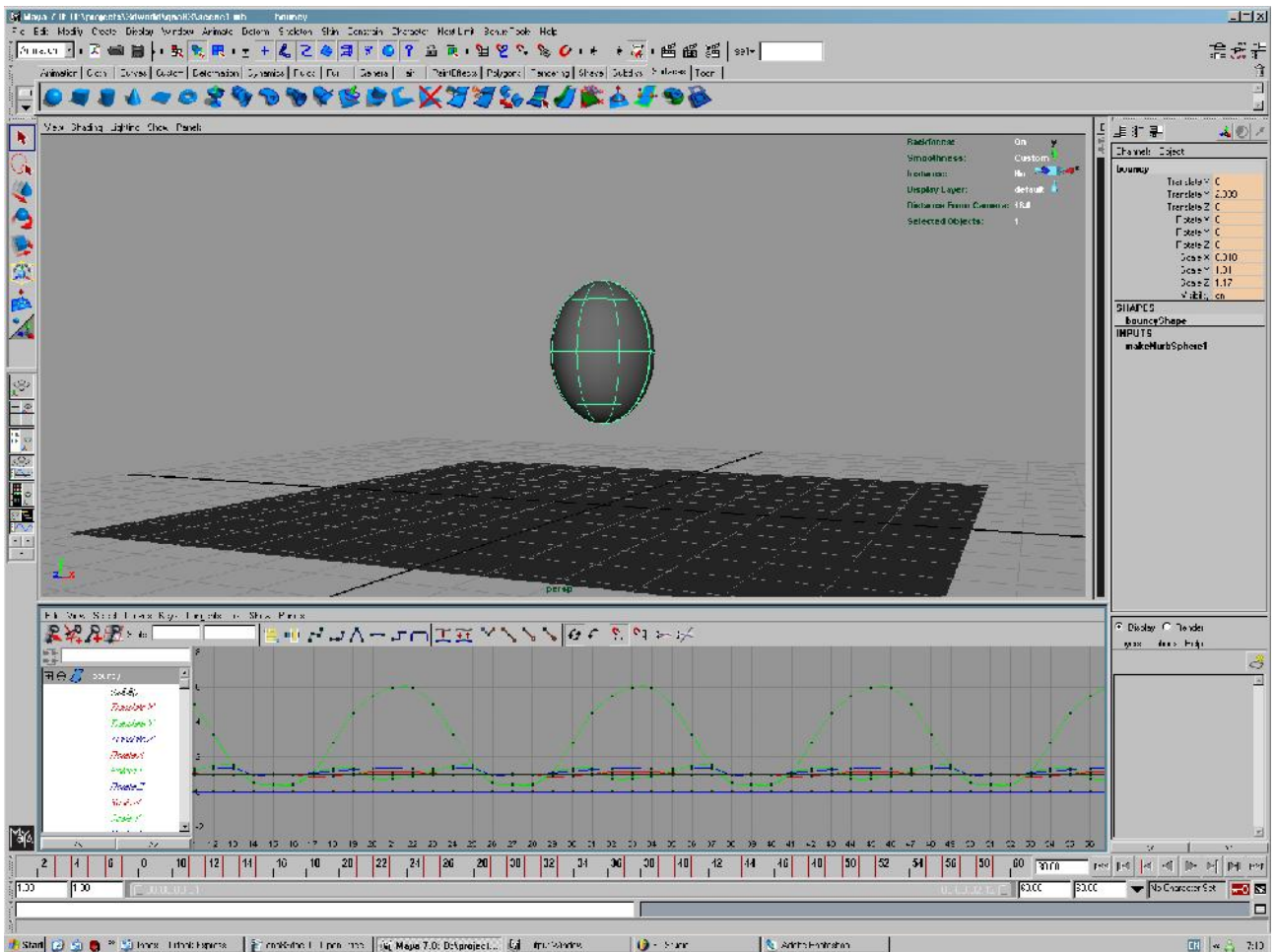
Perish the very thought, you software philistine. Do you really think that Maya would not allow you to do this? Well, you can. In fact, you've been able to do this since Maya's first release.

If you ever use Maya's dynamics systems, you may have used a function called bake simulation which sits in the key menu. Most of the time it is used to take rigid body animation and convert it into keyframes for editing purposes creating a key for every attribute of the selected object in the current frame range. The upshot of this is that whatever is selected in the graph editor including post cyclic events can be baked. Bingo.

Set your frame range to what you want to bake, open the graph editor and select the existing curves. Now in the edit menu select key > bake simulation. Running through the active frame range, this creates a keyframe for every frame of your selected object's animation. Once it's finished, you should see all your lovely keys which you can clean up and time stretch to your heart's content. Just remember to turn off the infinity cycle.



Okay, so here is a bouncing ball. It's a fourteen frame cycle, you can see the dotted infinity keyframes in the graph editor.



Once you have baked the simulation you now have all singing, all dancing curves that you can reverse, stretch, slow down, you name it.

Quick tip

Bake Simulation is a very useful tool. Used in combination with blendshapes, you can bake surface topology of deforming surfaces such as soft bodies