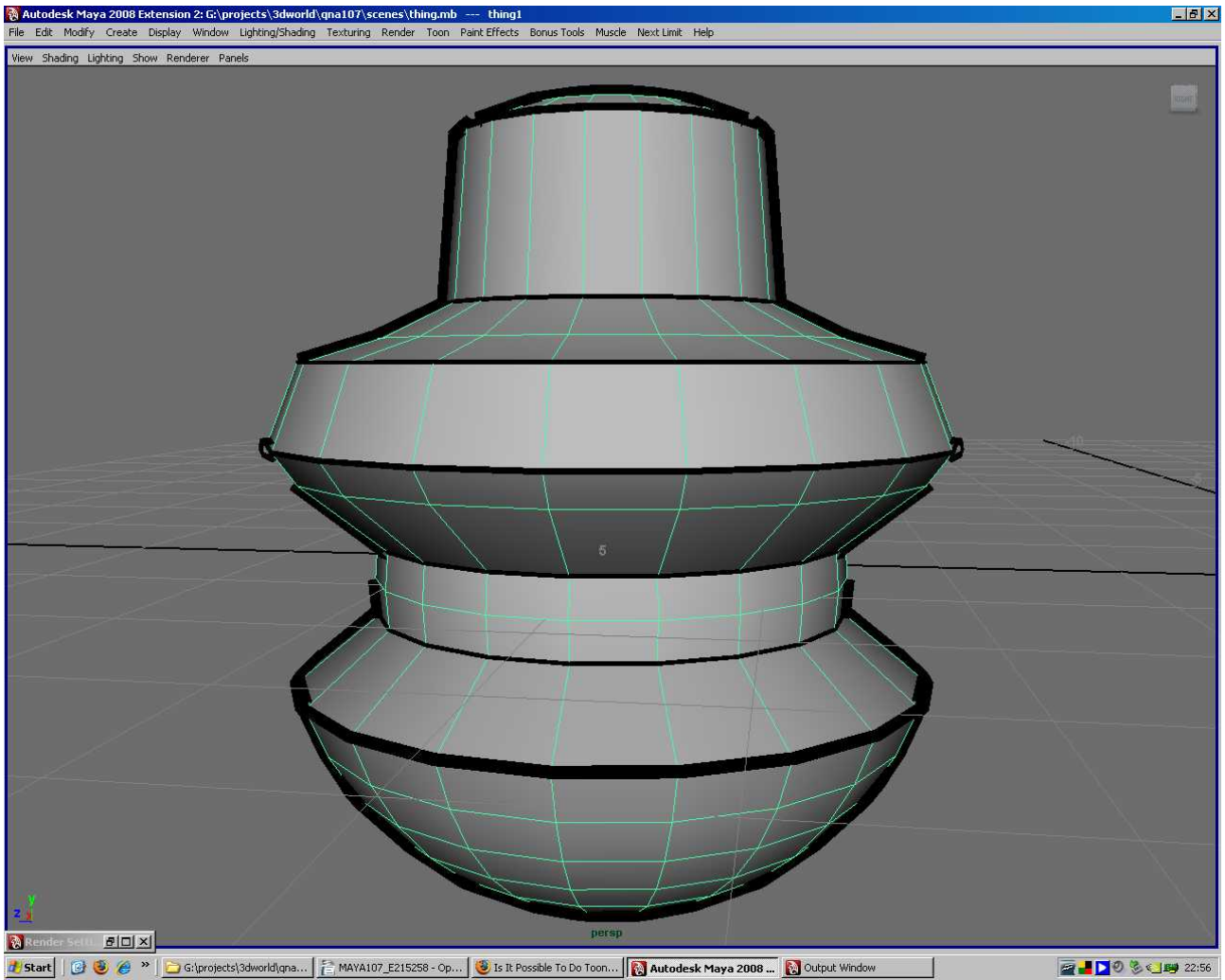


Maya QNA_107	First published in 3DWorld Magazine 107 August 2008
Question:	<i>Is It Possible To Do Toon Outlines On Instances? - davef</i>

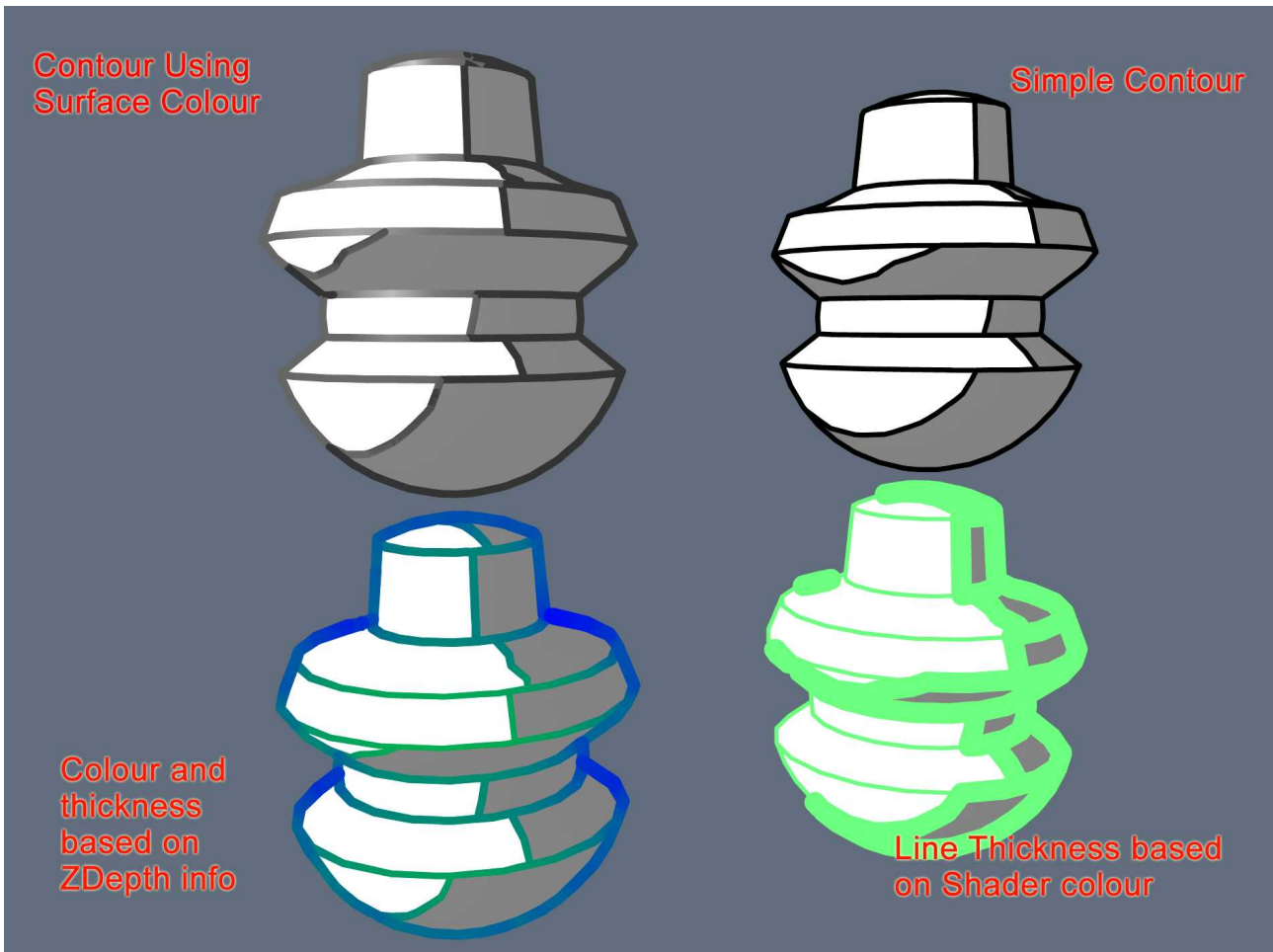
The simple answer to whether you can add Maya's Toon outlines to instances is no, you can't. The question you should be asking is why would you want to? Maya's Toon shading is just a rampShader, but it is a good exercise to make one from scratch without using the one click wonder of the Toon menu. And when you've got such a powerful contour rendering solution in Mental Ray why would you ever want to use a Toon Outline? Here's how you do it.

Let's start by opening start.mb that has two similar shapes in them. The closest one to us is toon shaded with that a Maya outline. On the other create and apply a new rampShader. Change the colour to a grey and white none interpolated ramp with the color Input set to Brightness. Now move on down the shader to the Reflectivity ramp and set that to 0. Hey Presto, you've just created a toon shader. Yes, I know it's the same as the original, but at least you now know where it comes from.

Now the contours. Open up the Render Globals, switch over to mental ray and Open the Contours rolldown menu, ticking the Enable Contour Rendering box. Scroll down and open the Custom Shaders rolldown menu. Click on the Store Shader Checkbox and from the Create Node window select a Contour_Store_Function. This stores the scenes object info required for rendering contours. Now click on the Contrast Shader checkbox and attach a contour_contrast_function_level node. This node is, in essence, your contour rendering control panel. Now go back to your object's Lambert and navigate to its Shading Group node, opening the mental ray rolldown in this node. At the bottom of the custom shaders you should see Contour Shader. Click on its checkbox and connect to this a contour_shader_simple. Go back to the Contrast function level in the Custom Shaders of the Render Globals and click off the Diff Index and click on the Contrast. Render.



Please tell me you don't think this is good? Maya's Toon Outline is okay, but it really is very rough around the edges, don'tcha think?



As well as the four types you see here, there is also a contour renderer that thins the lines towards the light sources in the scene. Brilliant.

Quick tip

The Render node window does not show the mental ray node names well. Instead, use the hypershade's create menu as it shows them in full.