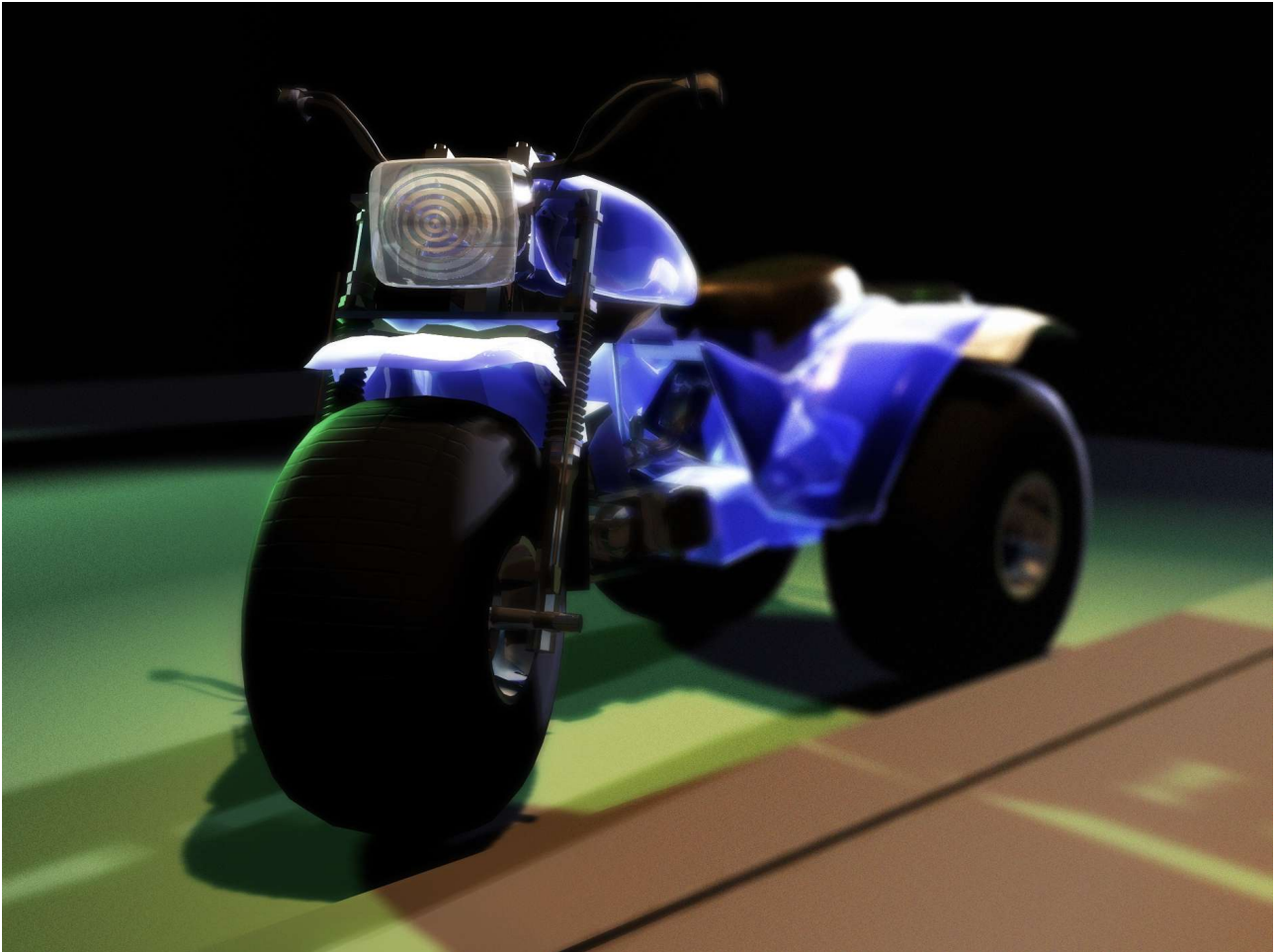


Maya QNA_96	First published in 3DWorld Magazine 96 November 2007
Question:	<i>How can I reduce my multipass render layers? 'WyndareIG' via email</i>



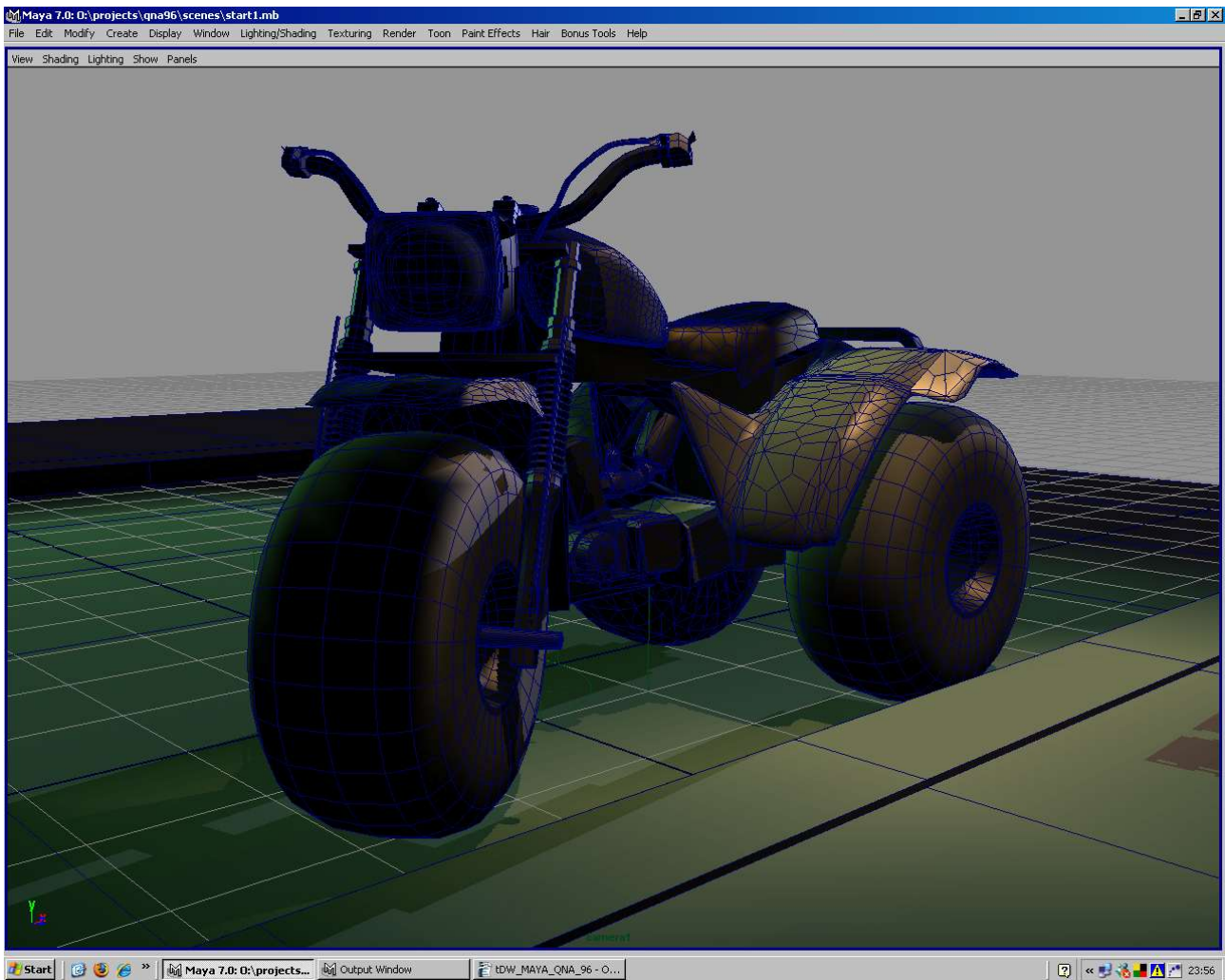
Turning good CGI into great CGI using grandstand compositing used to be something only available on the über-budgets associated with large scale production facilities. However, with the insurmountable price crash of Apple's Shake to a wonderful \$499 the ability to create film quality effects are now available to almost everybody.

This ability to combine different passes, however, does add to one problem and this is down to the storage required for so many images. What with surface colour passes, occlusion passes, reflections and the like you soon end up with a hard drive full of images and no room for your composite.

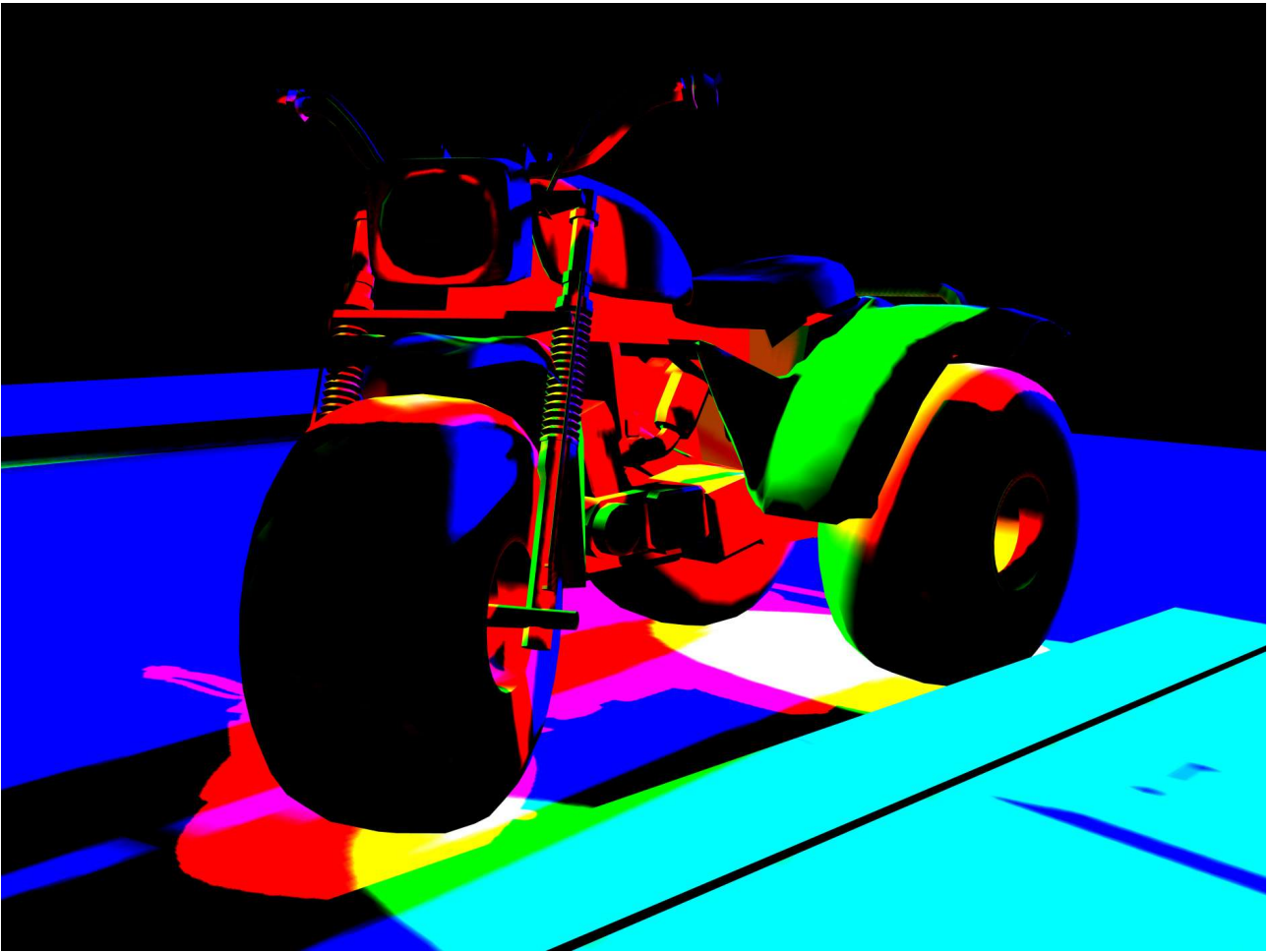
You can combine some things into one image, for example shadow passes. We assume that if you have multiple shadows you need to render out each one on turn. Not so, as by rendering out shadows as flat colours we can combine them into a single image, pulling out one colour at a time at the compositing stage.

To explain, let's open up start1.mb. In this scene there are three lights all casting shadows. Save the scene as shadows.mb and then select all of the geometry in the scene. Assign and brand new Lambert shader to them by selecting Rendering > Lighting/Shading > Assign New Material > Lambert. Set the colour value of this new Lambert to around .05. Now open up the first light, spotlight1. Set it's colour to 0 and then pop open the rolldown menu for the shadow. Click on the colour value to open up the colour picker and change the Shadow Color to red. Once you've done this click on the Value and set it to around 200.

Do the same for the other two lights, turning their Shadow Colors to green and blue. When you render out an image now, you should have three shadows colours. The overlapping colours make the image look a little odd, but you can easily extrapolate each of the primary channels to use as little or as much as you want to effect your final composite.



Oh, look. It's a sort of quad thingamajig bike thing. Hmm, what a dull render. If I could create multipasses I could make it special.



Wow! Look at the lovely colours! Forget that multipass rendering for better compositing rubbish, I wanna make everything look like this for now on!

Having many uses, you could use this method to combine, say, a red fog pass, and a green to blue depth pass into one layer.