

MAYA vertex color baking using mental ray

part 1 vertexColor in mental ray

from

http://download.autodesk.com/global/docs/maya2012/en_us/index.html?url=files/mrfMS_Render_color_per_vertex_in_mental_ray_for_Maya.htm,topicNumber=d28e632072)

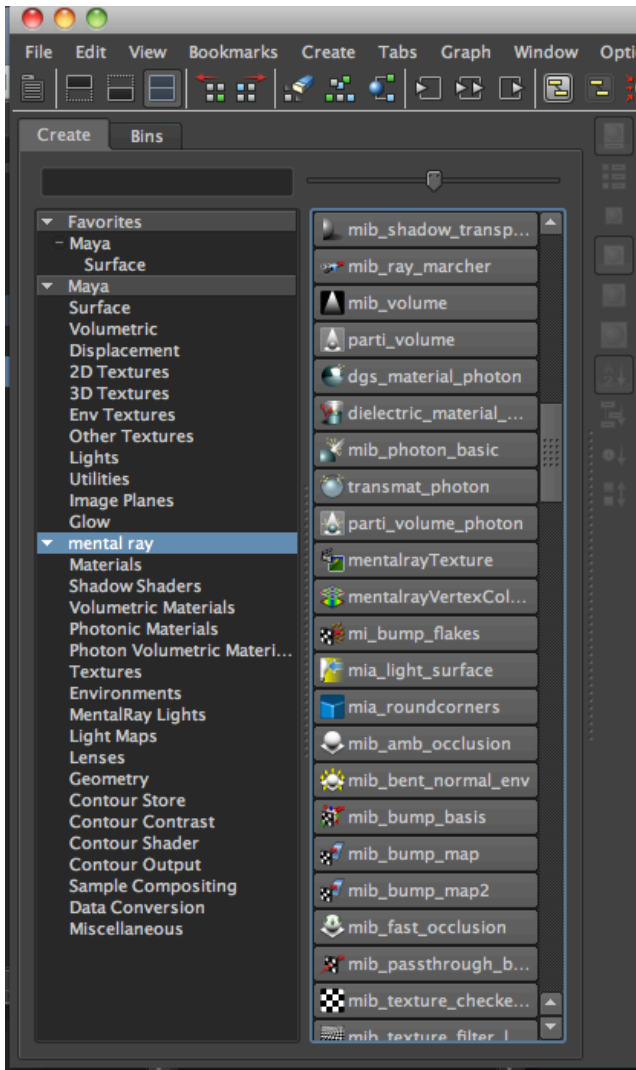
Render color per vertex in mental ray® for Maya® using the mentalrayVertexColors node.

It can be used in a shading network for rendering color per vertex. As a result, you can store shading and lighting information on mesh vertices (rather than shading networks), simplifying your scene and making it more efficient to render.

To use the mentalrayVertexColors node

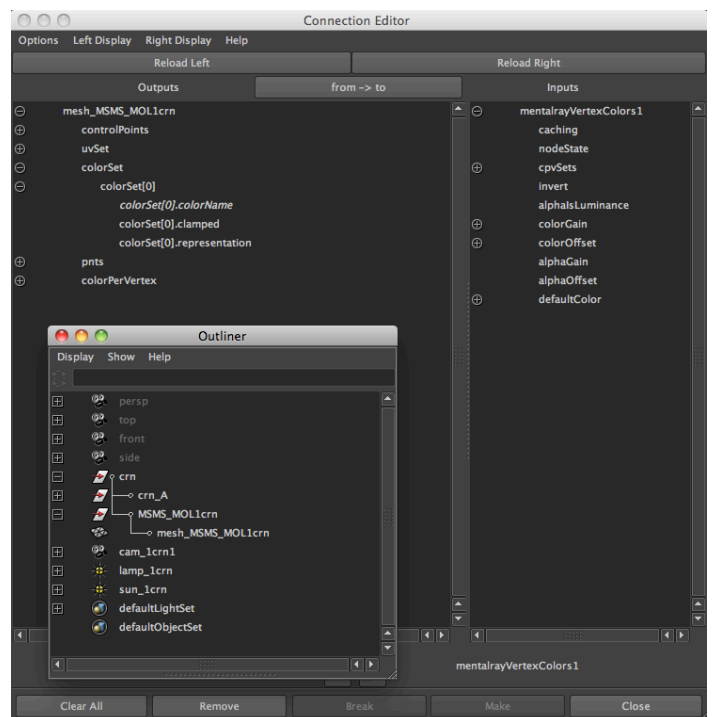
1. Create color sets. For more information, see [Polygon color sets](#) in the Polygonal Modeling guide.
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2. Create a mentalrayVertexColors node. For more information, see [Create a node](#).

Open HyperShade, under mental browse to the mentalrayVertexColors in the Connection Editor, load the shape node that contains the color set you want to use into the Outputs column. For more information, see [Connection Editor](#).



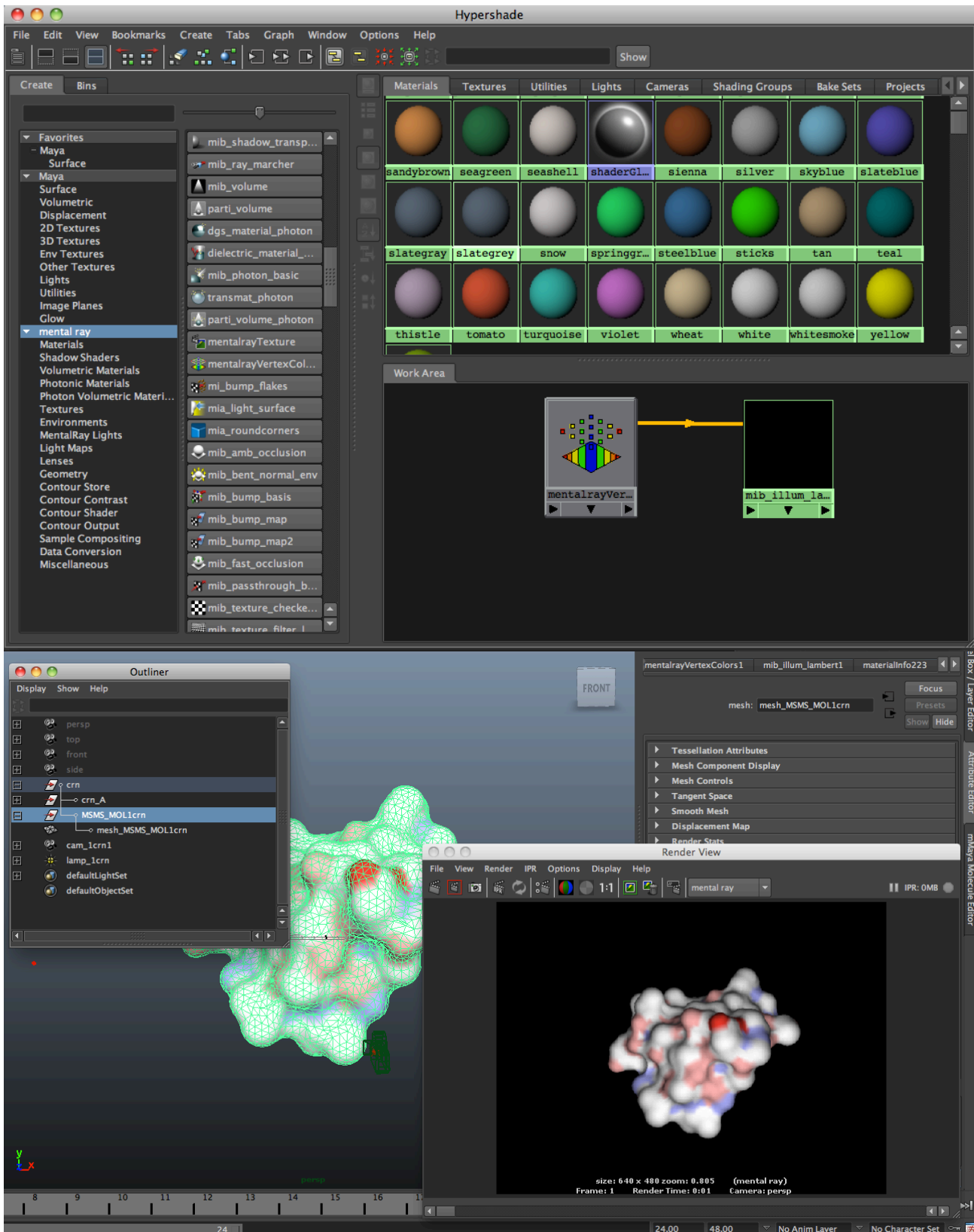
- select the shape/mesh object using the outliner (display shape active) and reload the left node in the connection editor

4. Load the mentalrayVertexColors node into the Inputs column of the Connection Editor.
5. Connect the output of the color set (colorSet[n].colorName) to the cpvSets input on the mentalrayVertexColors node.



6. Make connections from the mentalrayVertexColors node out color to the input nodes of a shader, as necessary. For more information, see [About shading networks](#).

- create a mental ray material shader node
- connect mentalrayVC node output outColor->outColor to the ambient input of the material shader
- apply the material shader to the transform node object of the mesh



Additional notes

- When a mesh has a connection between the meshShape.colorSet[n].colorName to the mentalrayVertexColors node, the color per vertex data of the mesh is exported as custom data for each vertex. In the case of multiple CPV sets, all of the CPV values are exported.
- If you want to force the export of all the CPV data for all the meshes in your scene, you can turn on the Export Vertex Colors attribute in the Render Settings: mental ray tabs, Options tab, Translation section. Exporting CPV data can be process-intensive, so do not turn on this attribute unless necessary.
- Vertex colors are exported as user data for vertices and are accessible from a shader.

Part 2 : Bake

From (<http://unity3d.com/support/resources/tutorials/lightmapping-in-maya>)
<http://www.game-artist.net/forums/vbarticles.php?do=article&articleid=17>

- 1 - Select the mesh shader material (the one receiving the VC) and Set the Ambient Color to max
- 2 - Render Settings -> Common -> Turn off the Default Maya Light, and remove all light from the scene
- 3 - Select the mesh
- 4 - Do an automatic projection to get the UV coordinate.
- 5 - Go to the polygon menu
- 6 - Go to color Color/Batch Bake (mental ray) (options)

you should now have the texture in Documents/maya/projects/renderdata/mentalray/lightmap. You can also do the illumination, ao map....

Note:

To convert a procedural texture or shading network into a File texture

1. Shift-click the object in the view and the material swatch in Hypershade.
2. Do one of the following:
 - * Select Edit > Convert to File Texture (Maya Software) in Hypershade.
 - * Click Edit > Convert to File Texture (Maya Software) > , adjust the options, then click Convert.