Hexagon Second Life Primitives

Draft

February 28, 2008

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Hexagon 2.3 - Second Life Sculpties

New in Hexagon 2.3 are the sculpty primitives for modeling objects that can be exported in TGA format then imported into Second Life (SL) and applied to a sculpted primitive in SL.

Using the Sculpty Primitives

The following steps are used to create, modify, and export sculpties in Hexagon, as well as importing and applying the maps into Second Life.

1. Create an SL Primitive and click on **Validate**.
2. Remap the sculpty as needed, based on the tools that will be used. See "Hexagon Tool Use on Sculpties" for a listing of what tools can and cannot be used on sculpties and which need remapping before being used.
3. Modify the sculpty as needed using the tools listed as safe to use in "Hexagon Tool Use on Sculpties."
4. Export the scultpy map.
5. Import the sculpty map into Second Life.
6. Apply the sculpty map to a sculpted prim in Second Life.

Creating Second Life Primitives

To create a Second Life primitive (sculpty):

1. In Hexagon, click on the **Second Life tab** next to the 3D Primitives tab.

This will bring up the Second Life primitives panel:

2. Click on the primitive tool icon you want to use.
3. Create the primitive in the viewport just like you would a regular 3D primitive.

Hexagon Tool Use on Sculpties

TIP! If you plan on painting on the SL primitive to create a texture, you must remap it **before** using any tools to modify the primitive.

Tools that can be used without remapping

The following Hexagon tools can safely be used to modify sculpties without remapping the primitive first but remapping will not affect the use of the tools. If tools will be used that require remapping, make sure you do so first before using any of the tools in this section.

- All manipulators: Translate, Rotate, Scale, and Universal
- All selection tools: Object, Faces, Edges, Points, and Auto Select
- Displacement
- Inflate
- Orient - Does not break SL primitive by itself, but unknown what other tools used with this might break it
- Pinch
- Quad Tessalation - Lessens edge smoothing on map and may provide better results in SL
- Stretch
- Soften

Projection tools that can be used

The following mapping projections can be used on the sculpties prior to modifying them.

- Spherical - Cube (on Y-axis), Sphere, Cylinder, Cone
- Cylindrical - Torus

Tools that can be used only after remapping

The following Hexagon tools can safely be used to modify the sculpty if the primitive is remapped before using the tools. Using the tools without remapping first will break the sculpty.

- Brush
- Export Bump
- Increase Smoothing
- Paint

- Smooth
- Taper - All types> Taper Deformer, Bender Deformer, Twister Deformer, and Deformer

Tools that can be used with caution

The following tools may break the sculpty when using, but judicious use may fix problems with the mapping. Save a backup of file before using. Results will vary and are up to the user's skill.

- UV Stretch
- Projection Editor
- Unfold

Tools that cannot be used on sculpties

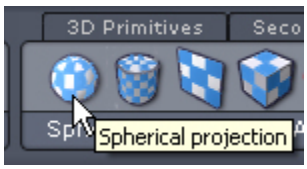
The following Hexagon tool(s) should not be used to modify sculpties as using them will "break" the sculpty.

- Bend - Breaks the SL primitive and even if UV Mapped before using, will still not perform as expected. Interesting results can be made but it is not generally recommended.

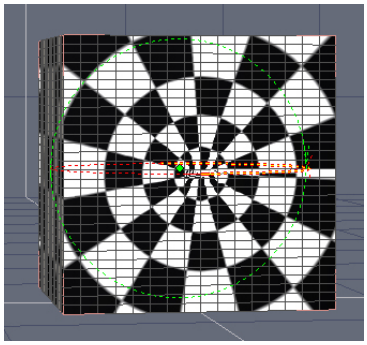
Remapping SL Primitives

To remap sculpties in Hexagon:

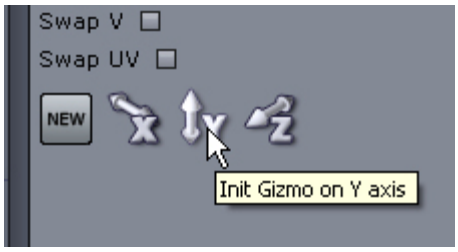
1. Click on the **UV Map & Paint tab**.
2. Click on the appropriate mapping projection depending on the primitive type:
    - **Cube**: Spherical Projection on Y-axis
        1. Click on the **Spherical Projection tool**.



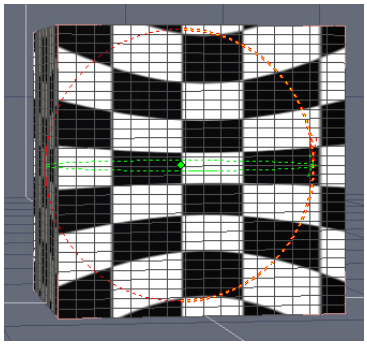
The cube will look like the image below.



2. In the Properties panel, click on the Init Gizmo on Y axis tool.

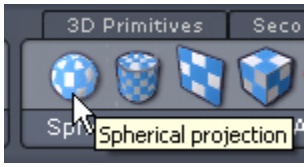


The cube will look like the image below.

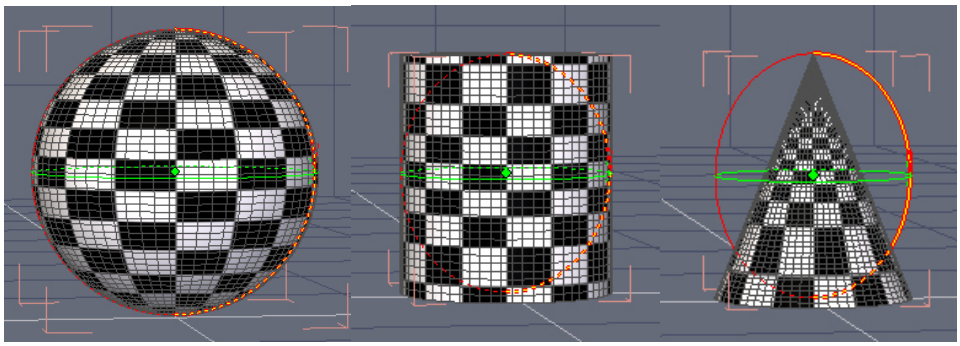


3. Click on the **Validate** button.

- **Sphere**, **Cylinder**, & **Cone**: Spherical Projection
    1. Click on the **Spherical Projection tool**.

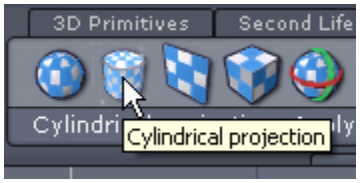


The primitives will look like the images below.

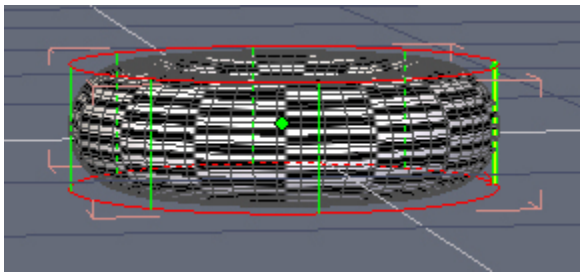


2. Click on the **Validate** button.

- **Torus**: Cylindrical Projection
  1. Click on the **Cylindrical Projection tool**.



The torus will look like the image below.

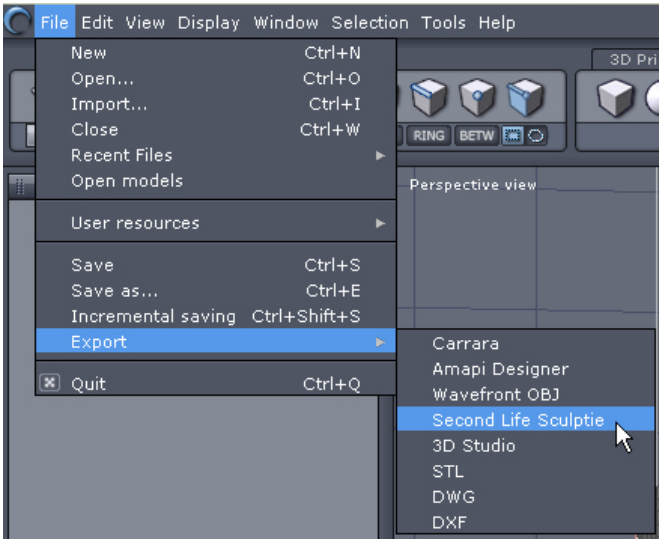


2. Click on the **Validate** button.

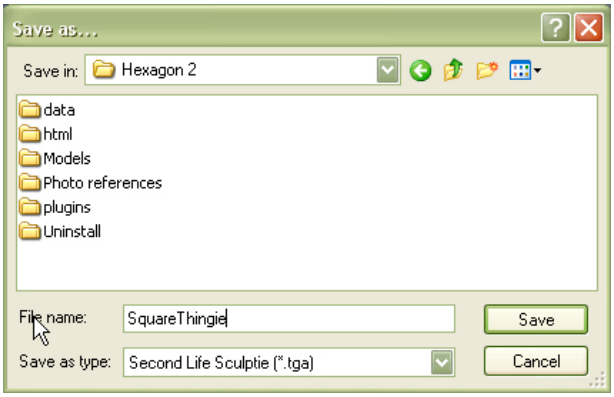
Exporting Sculpty Maps

To export the modified SL primitive:

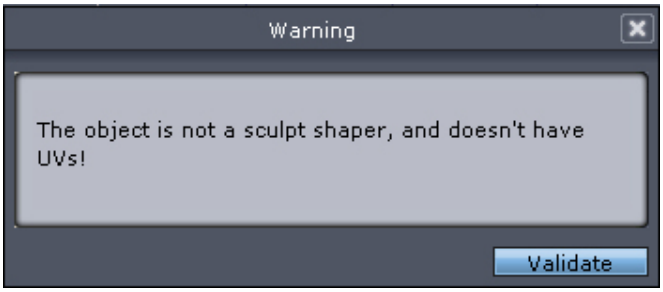
1. Choose **File > Export > Second Life Sculptie** from the menu.



2. A default save dialog will come up. Navigate to the folder where you want to save the file, enter a filename, and click on **Save**.



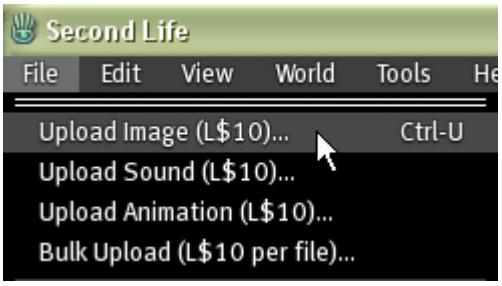
If you “broke” the sculpty using a modeling tool in Hexagon or tried to export a 3D primitive as an SL sculptie, you will get the following error message:



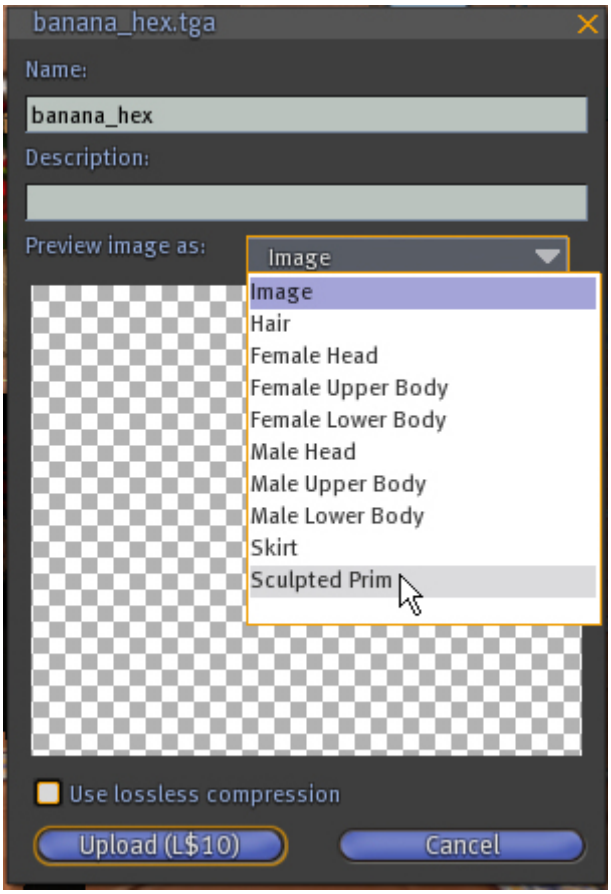
Importing the Sculpty Map Into Second Life

To import the sculpty map you just created into Second Life:

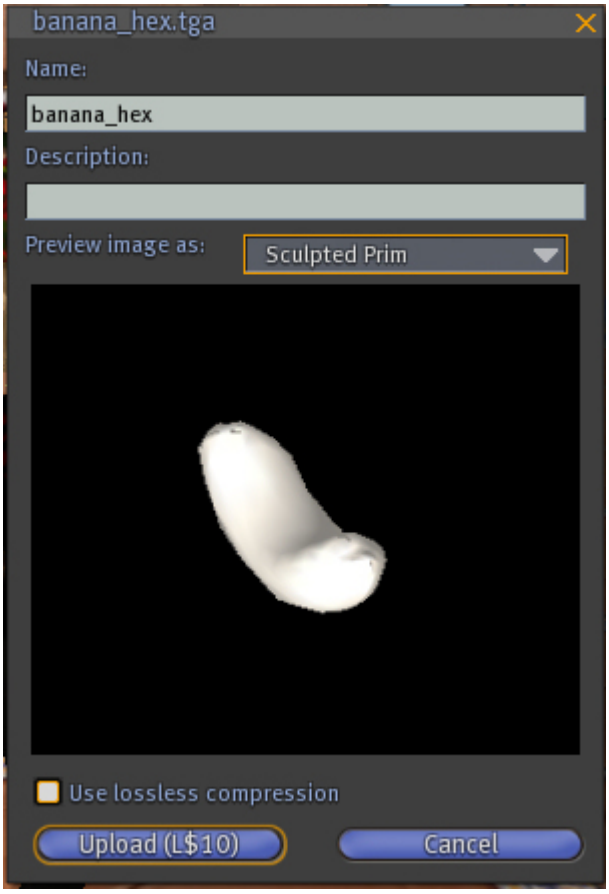
1. In Second LIfe, choose **File > Upload Image (L$10)** from the menu.



2. A default open dialog will come up. Locate the sculpty file, select it, and click on **Open**.
3. To preview the map as a sculpted prim, click on the **Image tab** and choose **Sculpted Prim** from the menu.



4. The object will be visible in the preview window (you may need to zoom in on it). Click on **Upload (L$10)** to upload the map (this will cost you L$10 to upload so make sure you have the funds available).



The map will be uploaded and a preview window will come up as well. Click on **Keep** and the map will be placed into your Textures folder in the Inventory dialog.

Applying the Map to a Sculpted Prim

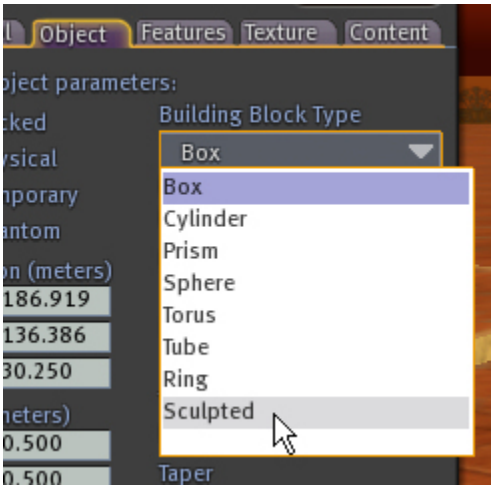
To apply the sculpty map to a sculpted prim in Second Life:

1. Make sure you are in a location that allows you to build/create objects.
2. Right-click on the ground and choose **Create** from the pie menu.

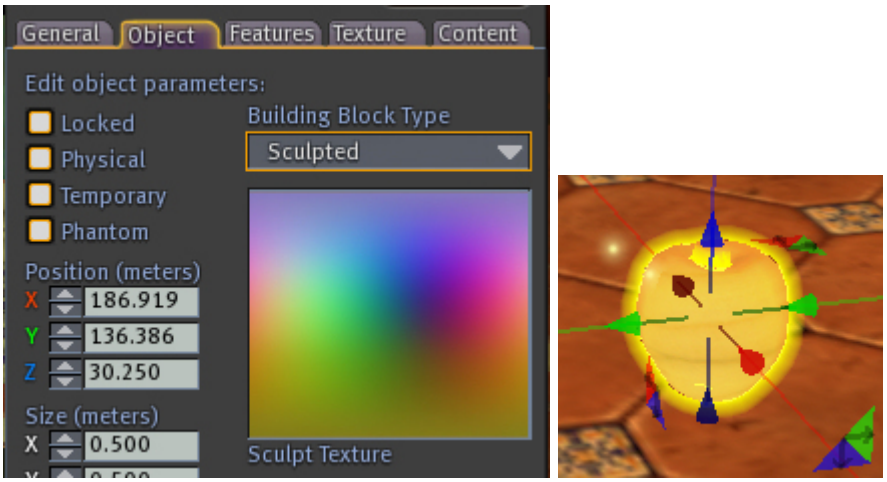
3. The **Create dialog** will come up but don't worry about selecting a particular type of primitive. Just click on the ground to create the default cube.

4. In the Create dialog, click on the More button if needed.

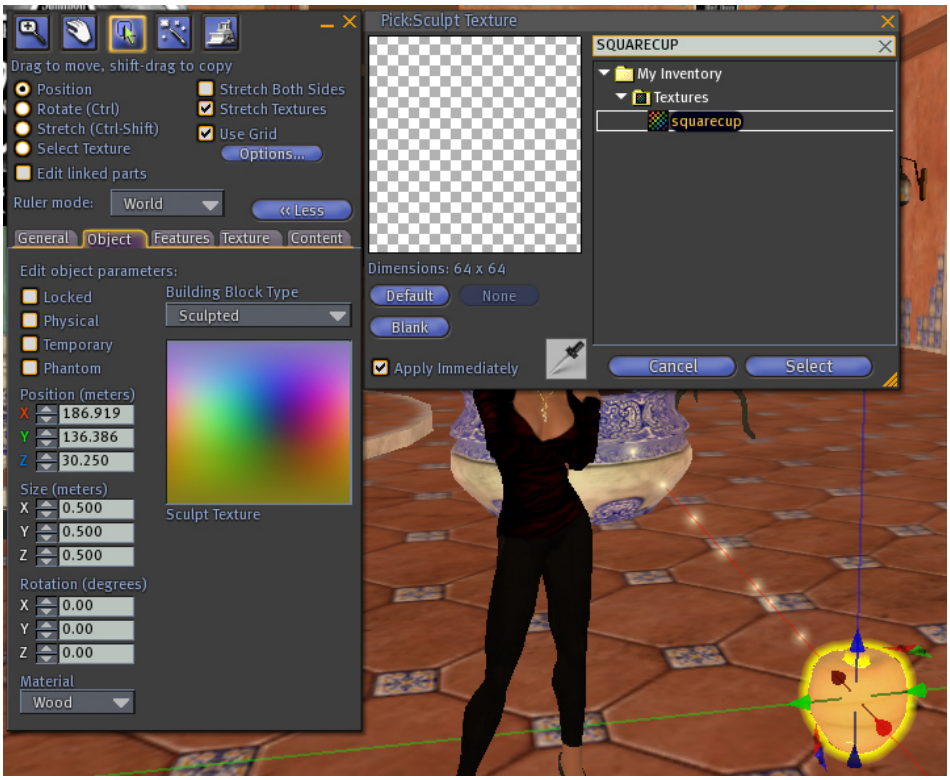
5. Click on the **Object tab** and choose **Sculpted** from the **Building Block Type** menu.



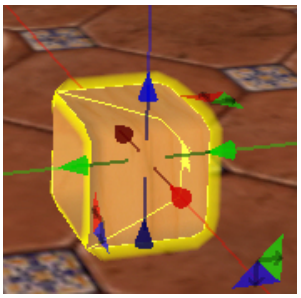
The default apple sculpty map will be loaded and the sculpty will now look like an apple.



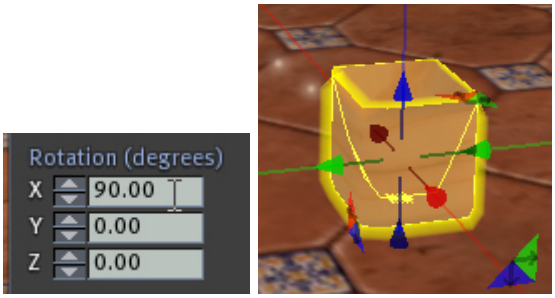
6. Click on the **Sculpt Texture** box to access the **Pick:Sculpt Texture dialog**, locate your map, and click on **Select**.



The sculpty map will be applied to the primitive. It may be on its side though.



7. On the object tab or using the rotate widget, rotate the primitive until it is right side up.



8. Now texture the sculpty and have fun.

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