## **Texture Mapping**

#### To Apply a Texture Map to an object:

Access the Attributes window (A-2); select Textures from the pull-down menu; choose the PICT image you want to apply as a texture, then drag its icon to the Attributes bin in the object's Cell Info dialog. The icon expands to an Attributes Icon.

Double-click an icon in the Attributes-Textures window (A-2) to display the PICT full-size.

#### About PICTs --

To use a PICT as a Texture it must be 72 dpi resolution.

If the PICT will show in the rendering close to the camera, then it should be large in dimension (640 x 480 pixels or higher) in order to avoid pixelization of the PICT image.

For the PICT icon to show in the Attributes window (2-2), it must be in the Presenter Plug-ins folder before you launch Presenter. To avoid having an excessive number of PICTs in the Plug-ins folder, store the PICTs in a separate folder, then put an alias of that folder into the Plug-ins folder. This is a handy way to keep PICTs for different projects organized as well.

All settings for PICTs may be used in the same way for QuickTime movies.

Expanded Attributes Icon (six buttons; Velocity/Time curve button) Double-click on the icon to access the Mapping Method dialog box. Click on a button to toggle it on/off.

### Apply To (far-left three buttons)

Top button (check box icon) to apply the Attribute to the item whose Cell Info Attributes

### bin the icon is residing.

Middle button (folder icon) to apply the Attribute to the folder (and its children (folders and objects)) whose Cell Info Attributes bin the icon is residing. Lower button (pencil icon) to apply the Attribute to the individual objects in the folder (does not include folders) whose Cell Info Attributes bin the icon is residing.

Apply to ND Cells (left three buttons)

Applies the Attribute to any ND Cells in the Script window that are colored the same as the button.

The Collision Detection Animator - Attributes Icon has one extra button at the top-right. This button determines the color of ND Cell that will be generated by the Animator.

### Mapping Method dialog box

Note there are four display-only windows (Top, Front,Ride side views) showing a wireframe preview of the object being mapped and the PICT image (distorted to fit the display).

Except for polygonal meshes, and 3D Primitives, a red positioning mesh will show in the display-only windows. The red positioning mesh corresponds to the size/position of the PICT in relation to the object.

For all but Projection, the large Grid window displays a solid-line box corresponding to the PICT image on the grid corresponding to the entire surface of the object. Drag the solid-line box around to position the PICT image on the object surface, while observing the red positioning mesh.

When Projection is selected the Grid window displays a wireframe preview of the object, and the solid-line box corresponding to the PICT image. Drag in the Grid window to position the projection of the PICT image on the object (the object appears to rotate about its center point -- however, the object in the scene is unaffected by this rotation.)

#### Mapping Method (pull-down menu)

Choose the manner in which you wish to map the PICT to the object: Wrap -- red positioning mesh adheres to the surface of the object. Projection -- red positioning mesh shows as flat 2D.

#### Cylindrical/Spherical/Cubical

These three methods can be used for mapping onto objects that are similar in shape to a Cylinder (or Sphere or Cube). These mapping methods employ a combination of Wrap and Projection. The image is projected from its position on the Cylinder (or Sphere or Cube) onto the object.

Cylindrical -- red positioning mesh adheres to a "cylinder" closely surrounding the object.

Spherical -- red positioning mesh adheres to a "sphere" closely surrounding the object.

Cubical -- red positioning mesh adheres to a "cube" closely surrounding the object.

Apply Texture To (pull-down menu)

Choose to apply the map in a particular manner.

Color -- applies the PICT image so that the color of the map replaces the color of the object where it is applied.

Stenciled Color -- applies the PICT image so that the color of the map replaces the color of the object where it is applied; BUT uses the 4th Channel (Alpha Channel) on the PICT image file to knock-out parts of the image, showing the object color. The Alpha Channel parts to be knockedout must be black.

The PICT image must have the 4th Channel and be saved as 32-bit PICT to use this setting.

Bump -- applies a gray-scale (internally computed for color PICT) image of the PICT to emboss the object (no actual change to the geometry or object color). Make an entry in the z-scale data field to determine the depth/height of the emboss (use a negative number to reverse the direction of the bump.

Custom... -- access expert texture mapping functions. See Texture Mapping folder for detailed explanation of use of the expert texture mapping functions.

#### Center x, y, z (three data fields)

Make entries (number) to precisely position the center of the solid-line box (PICT image) in the Grid window. Use for minor adjustments to the position of the image not possible by the intuitive dragging of the solid-line box.

Scale x, y, z (three data fields)

Make entries (number > 0) to precisely enlarge reduce the solid-line box (PICT image). The solid-line box is pre-scaled so that one of the dimensions has a scale value of 1 (wrap method); corresponding to the entire length of the surface in that dimension. So, changing the Mapping Method will require you to re-scale the solid-line box to get the proper sizing of the image on the object.

Use only the x-scale and y-scale for scaling the solid-line box; the z-scale is reserved for Bump mapping. If the image maps as a mirror image, use a negative number for the appropriate dimension (x or y) to flip it back.

#### Orientation x, y, z (three data fields)

Used only when employing Projection Mapping Method. Make entries to precisely set the rotation of the wireframe preview in the Grid window. Use for minor

adjustments to the position of the image not possible by the

intuitive dragging of the solid-line box.

# Movie Parms... (button)

Only available when mapping a QuickTime movie as a texture. Click to access the Movie Parameters dialog box. See the Tmap doc.pdf file for more detailed information about this dialog box.