Clip Mapping

By Peter Rancatore
Why use a clip map?

Clip mapping is a good way to give an object a rough, uneven edge. It is most commonly used to make cloth or paper look old and tattered.
Like this
A brief overview of what’s to come

- Build an object in modeler
- Create a clip map drawing
- Find or create a paper texture
- Apply clip map and texture in Layout
Building an object
The object can be anything, but here is how to make the hanging wall scroll shown above

- First, make a bar using the disc tool.
- Add a sphere to each end of the bar.
- Attach a short bar to each sphere (for attaching the whole thing to the wall).
- Make the roll of paper (using the disc tool again) over the bar.
- Finally, make the hanging paper using the box tool. Give it a slight thickness, a couple of millimeters should do it.
Important notes about the hanging paper

• The paper should be slightly wider than the roll, because part of the edge will be cut off when you apply the clip map.

• Make sure the paper is on it’s own layer. Do not merge it with the rest of the object. Ever. It will cause all kinds of problems when you try to add the clip map.
Make your clip map

• This can be done in most drawing programs like Photoshop or Mirage. Use one you are comfortable with. Don’t use Mirage if you don’t have to though. It is truly evil.
• Use the pencil to draw the edge, then fill in the outside with the paint can.
• Turn off anti-aliasing if you can. I don’t think it’s imperative but it looks better.
Important

• In Mirage you don’t use “save as” to save files. Use “Export project to” in order to save files. I don’t know if this is true in other programs or not. So select “Export project to” if it’s there.
• When you save this, it needs to have an alpha channel. Jpegs don’t have alpha’s so…
• Set the format to tga or tiff
• Set the mode to RGBA. “A” stands for alpha.
• These options should be in the saving window that pops up. If they are not, ask a supervisor for help.
Texture

- If you know what you’re doing you can make a texture in a Photoshop-like program using filters and spray-paint tools.
- But if you’re a beginner like I was, I strongly recommend just finding a texture online.
- To the left is the texture I managed to make using Mirage. But it took much cursing, pleading for help, and bashing my face against the keyboard.
Applying Texture

• Open Layout and load your object
• Click on “surface editor”
• Select the hanging paper
• Click on the “T” next to texture
• Click on “load image” and find your paper texture
• Autosize it.
• Make sure it’s on the correct axis

• You may be able to use the same texture for the paper roll. Just remember to change “projection” from planar to cylindrical
Clip Mapping

• Click on the “**objects**” button at the bottom of the screen.
• Now click directly on the hanging paper so it is surrounded by a dotted line.
• Next, click the “**item properties**” button at the bottom of the screen. The window at the right should appear.
• Click the “**render**” tab, and click the “T” next to “clip map”.
Getting Close

- In the next window, click the button next to **image** and drag down to “load image”.
- Load your clip map.
- Set both the **width tile** and **height tile** to “mirror”.
- Turn off **texture antialiasing**
- Make sure it’s on the correct axis.
- Click “**automatic sizing**”.
- Now click the “**edit image**” button.

(note) Pixel Blending didn’t seem to make any difference on or off, but this may depend on the texture.
Almost there

- Click the **Editing Tab**
- Click on **Invert**. This changes the outer edge to white and the inside to black. It seems counterintuitive, but this was what worked for me.
• Before you do a render you may want to change the background to something other than black. Do this by clicking the **Scene** tab, then hit the **Backdrop** button. Change the color with the window that comes up.

• Now press F9 to do a render.
Hopefully this is what happens.
Thanks for reading

• I hope ran into less problems than I did.