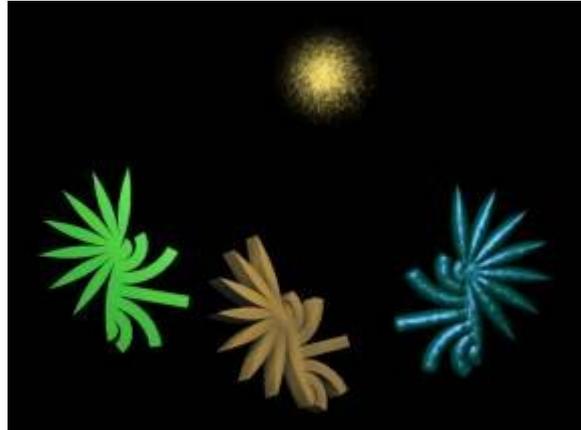




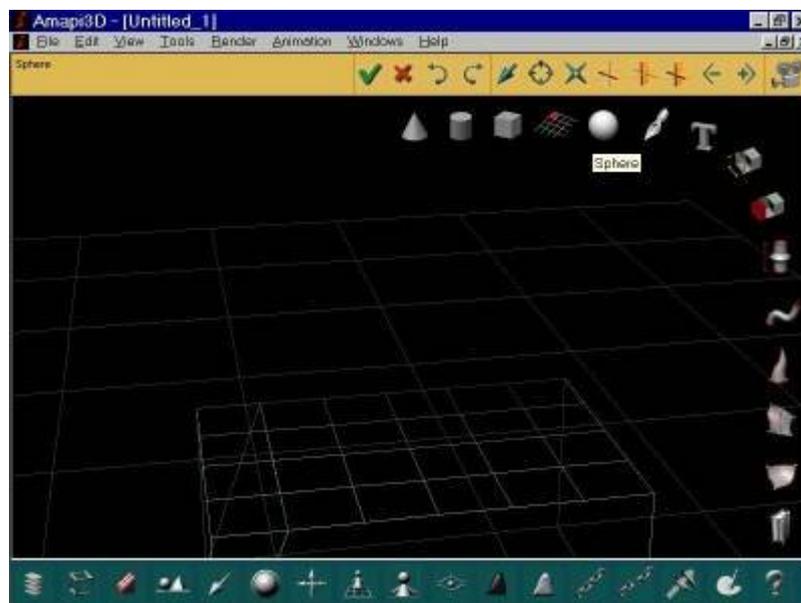
Three Little Indians... Dancing Under a Star



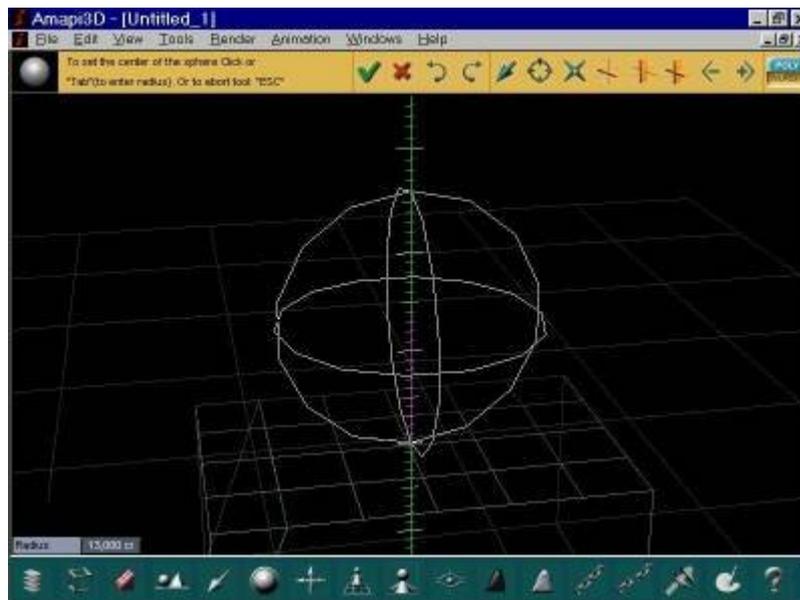
by Philip Staiger

In this short exercise, we experiment with a special tool from Amapi - the **Unfold** tool.

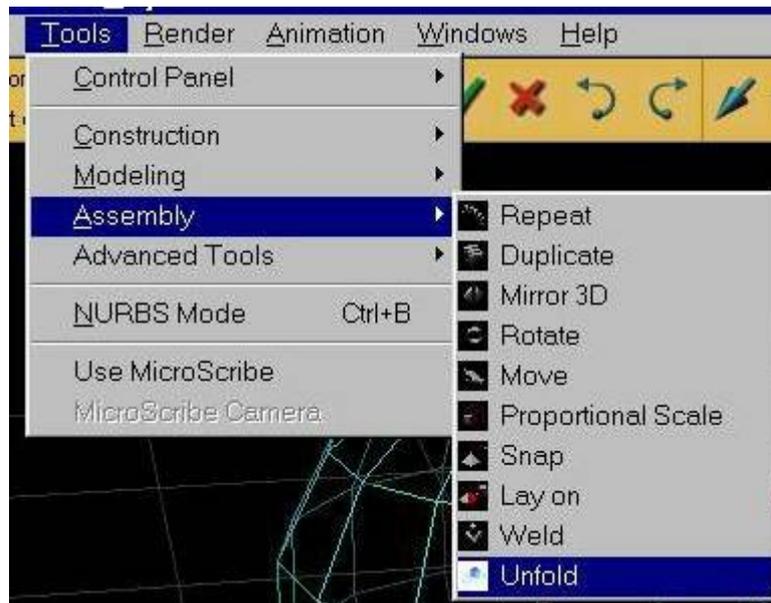
Start by selecting the front view and click on the **SPHERE** tool from the construction toolkit.



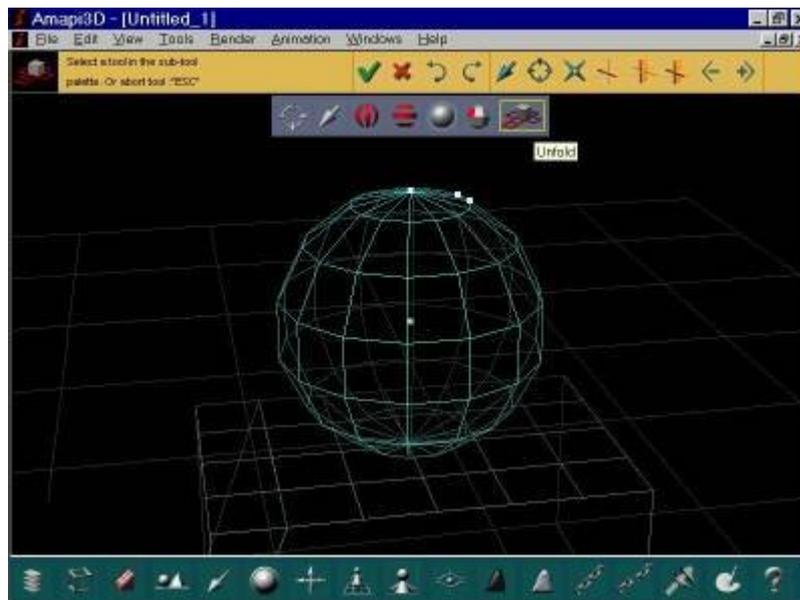
Click on the workbench to position the bottom of the sphere. Then drag the cursor up to size the sphere, and click again to fix the size, then hit RETURN to finish (use the default tessellation count).



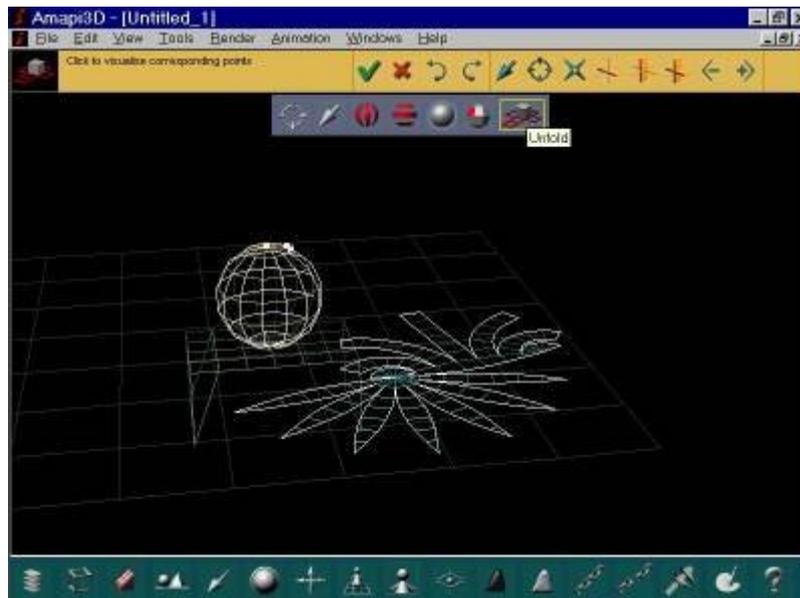
Select the **UNFOLD** tool from the Assembly toolkit:



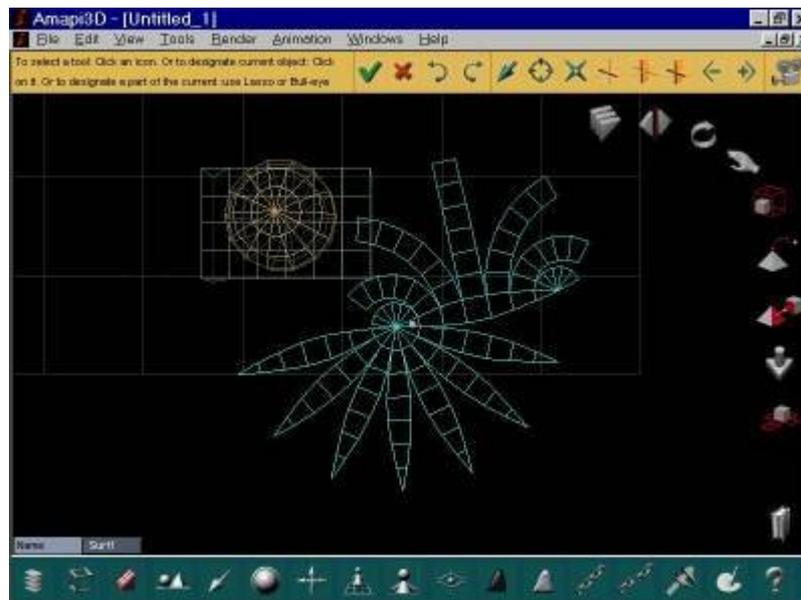
Go right to the Unfold action on the right side of the popup.



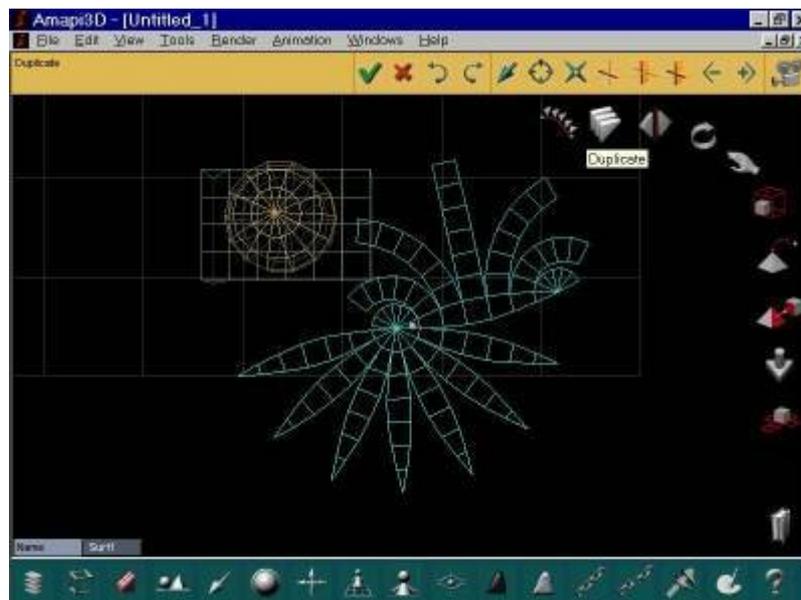
Amapi will use default parameters to open the sphere into a set of flat areas, all connected (in this case).



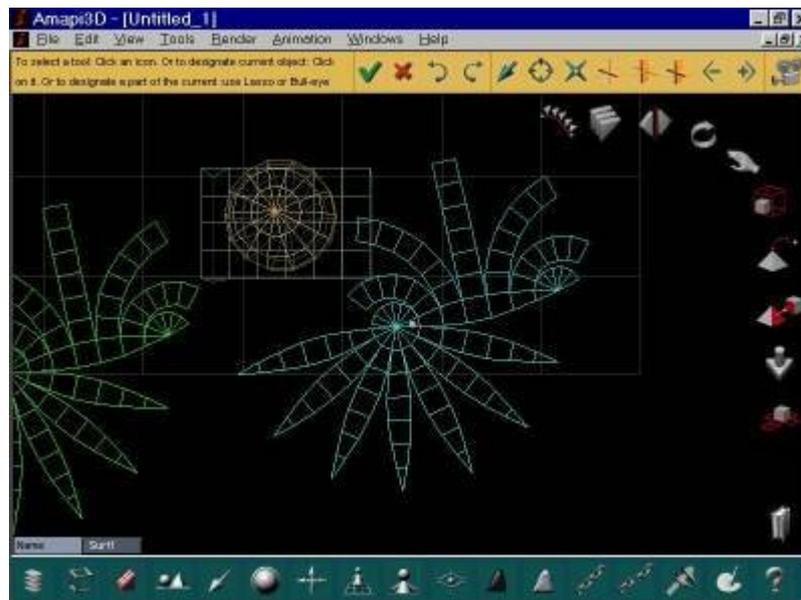
Select a **top view** (hit '2' and then '5' on the numeric keypad to go to front and then top view, or select the desired views from the **View...** menu).



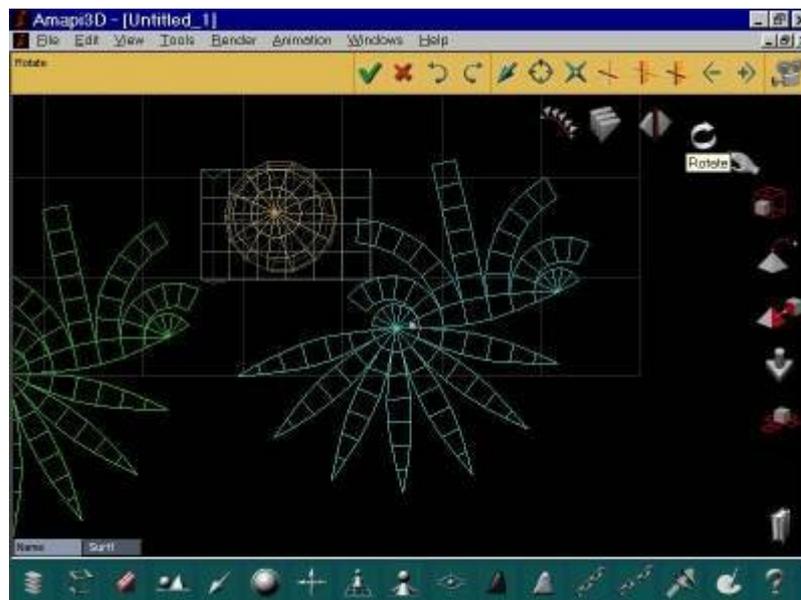
Now select the **Assembly toolkit** and click on the unfolded (flat) shape to make it the current object. Then click the **Duplicate tool**.



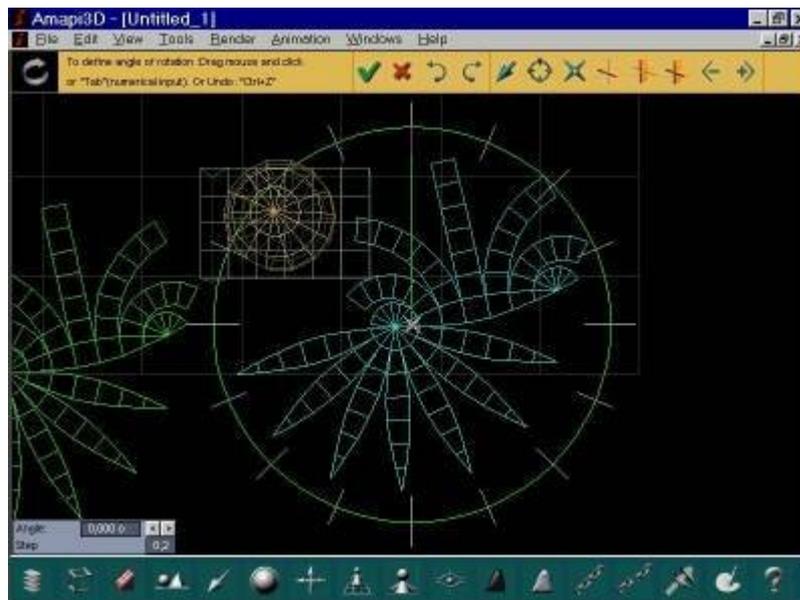
Click the flat object and drag its copy to the left edge and click to drop it there.



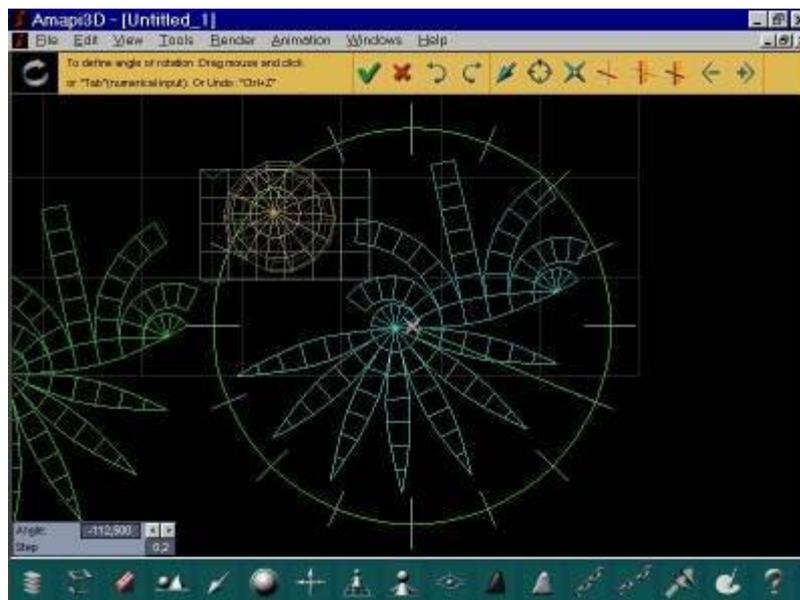
Hit the RETURN key to finish (or swipe the tool away to the right side of the screen).
Click the original flat object again and select the **ROTATE** tool.



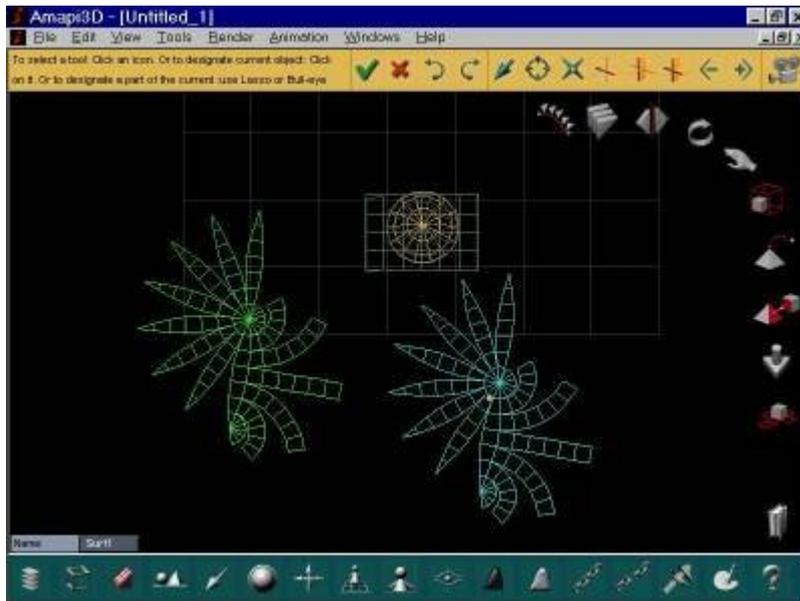
We will now **rotate** the center flat object to turn it into a little dancing indian. click the top (12 o'clock) tickmark.



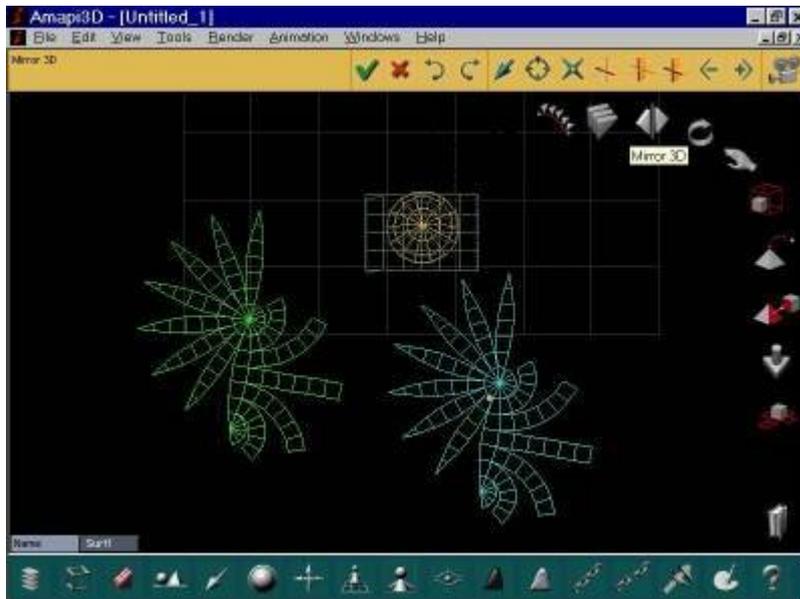
Move the cursor to the right-bottom side, around 4 o'clock position, and click again to set the rotation to that amount.



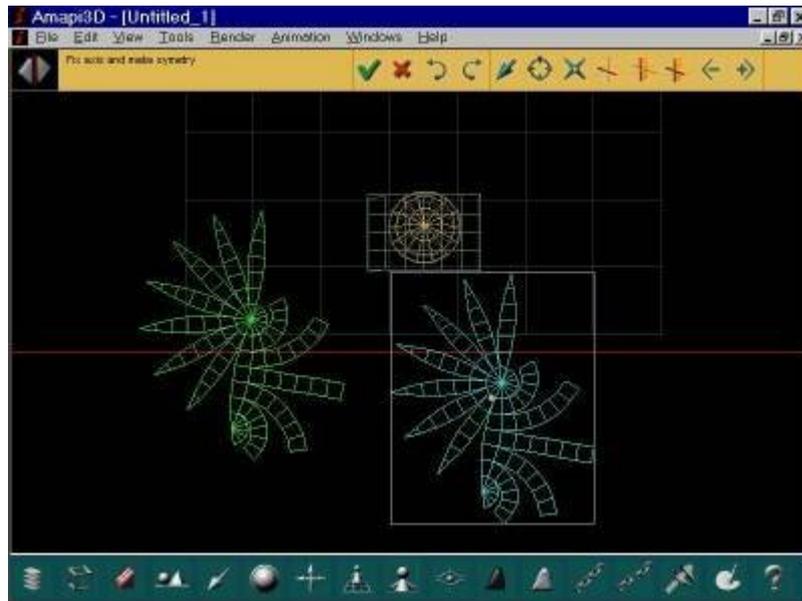
Swipe the tool away (or hit RETURN) to finish. Repeat the rotation on the other indian.



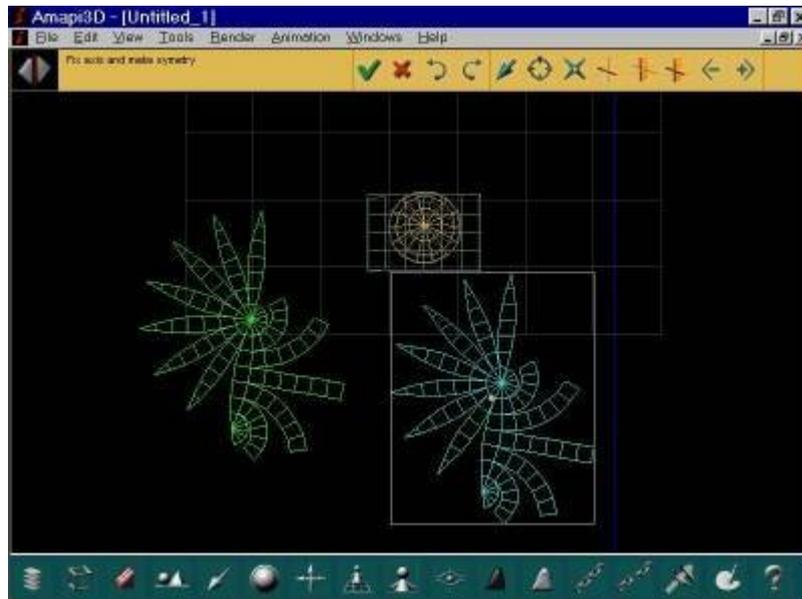
Select the original indian (the one on the right side) and click the **Mirror3D** tool



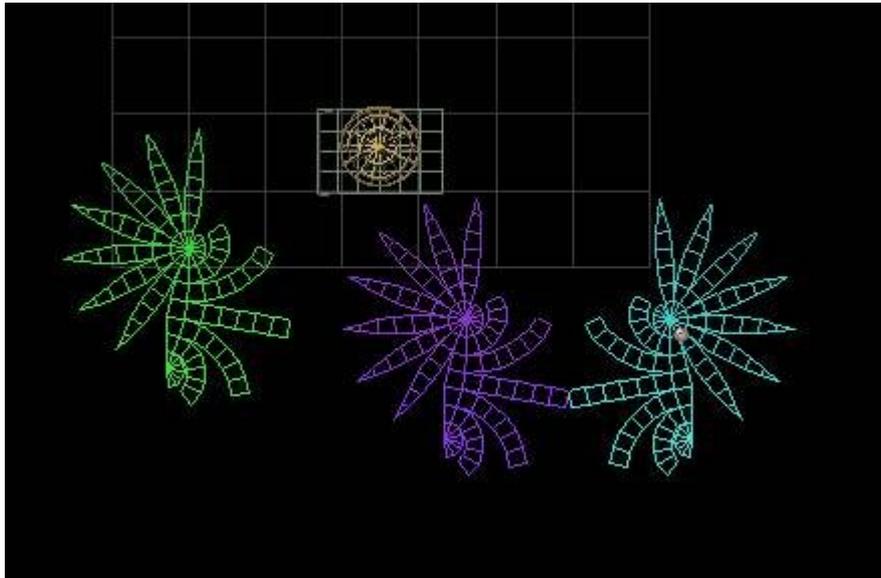
A horizontal (red) mirror axis is shown.



Hit the SPACEBAR in order to toggle to the vertical (blue) axis.



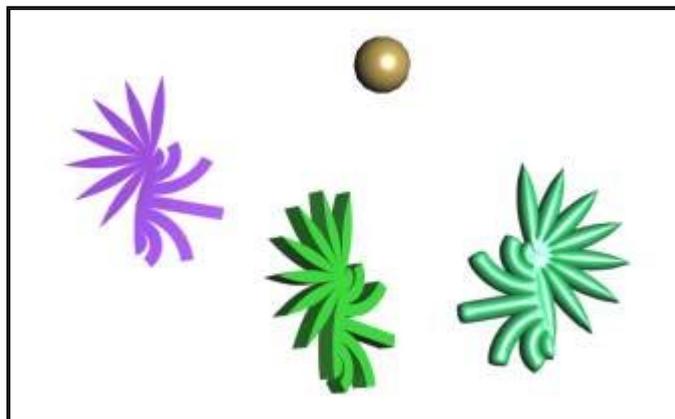
Click on the right side of the indian's bounding box. This will create a mirrored copy.



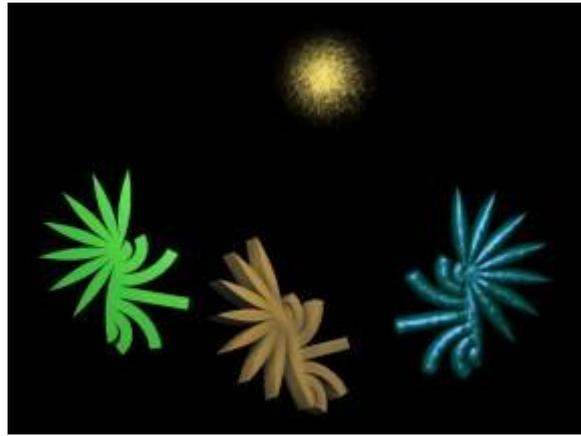
You can now experiment with other options, such as

- apply **thickness** to the middle and right indians (Modeling toolkit)
- **Smooth** the right indian
- apply materials (like **leather**) to the right indian
- **rotate** the middle indian at an angle (use front view)

Hit the RETURN key to generate a rendered view. Here they play with a ball.



In this next example, I've used some bump map textures and made the original sphere a little bit larger. Now they're dancing to a bright star or fireball in the midst of the night...



Here's a final use: a new business card :-)

It was completely modeled and rendered in Amapi 3D - even the text.



You can click it for a close up.

the end