

Hey, hey, hey! Look at what we have here. At last I get around to doing the second part of the Alien Fekka! tutorial. This part deals with mapping and texturing of the lil guy, and the application of a slightly new slant on the unwrap technique I developed some time ago.

### A long time ago, if a galaxy far, far away.....

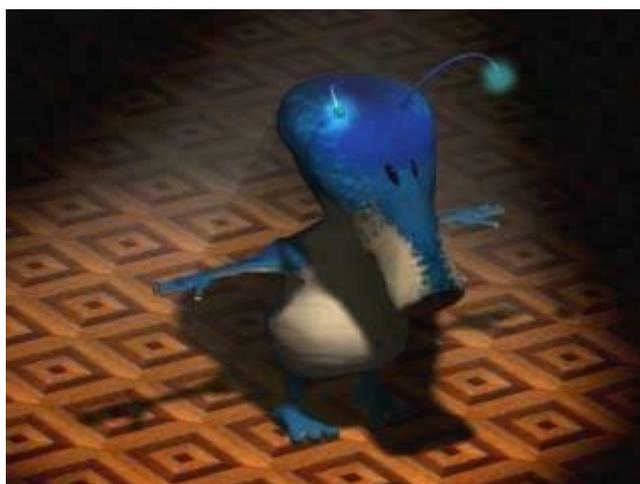
---

O.k, so you've done the first part of the series and now you wanna get some textures on the guy. You've got this elaborate pattern all figured out, it wraps itself all around your model. But how the hell do you map it? Well in the normal Max way of doing things you don't. Max has no way to apply complex mapping co-ords to organically shaped meshes. So normally you would find it very hard to map such a character as the lil alien fekka!.

In the perfect world you would draw your texture flat on one bitmap and let the program wrap it around your model.

Well it's not quite a perfect world, but with this method of mapping it's at least one step closer.

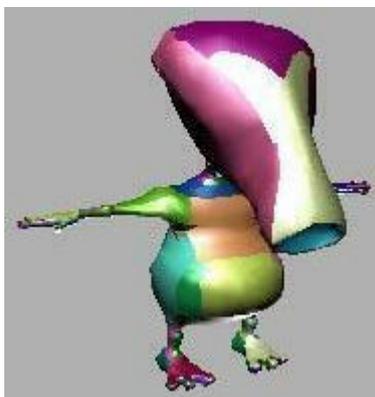
**BE WARNED** this is a slow process, especially if you have a very complex mesh. But at least it requires no plugins and is guaranteed to work on all versions of Max (and probably most other 3d programs as well)



This is the sort of thing we're aiming for, now the texture may not be to your liking but that's not the point. You're supposed to be looking at how it moulds itself around the mesh. This texture is one bitmap. **Step one, you kiss and hold her tightly.....?**

---

The first thing you need to do is to take your mesh and cut it up - yeah! you heard me right - cut it up! You need to split your mesh into areas that can be basically mapped flat. I.e. the side of the head, the top of the hand, the bottom of the foot etc. Go over the whole mesh and split it in to chunks.



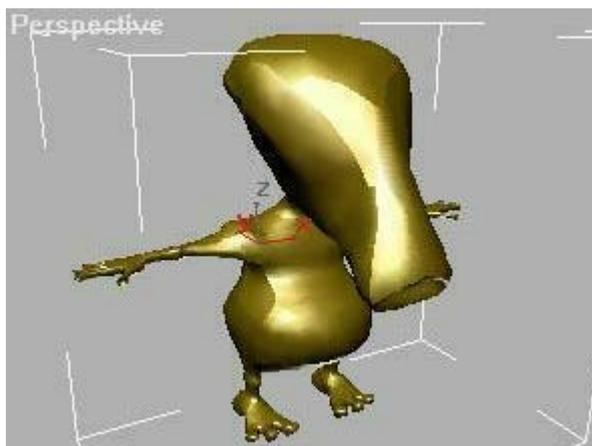
With my model, it looked like this after it was chopped (no mercy!). This is the first slow process. The more complex the model, the longer it takes.

### Move and stretch and lift and relax....

---

Now you're ready for the next bit. Stick it all back together again - "WHAT!, you've gotta be kidding. I just spent five hours chopping it all up, and you want me to stick it back together!!!!"

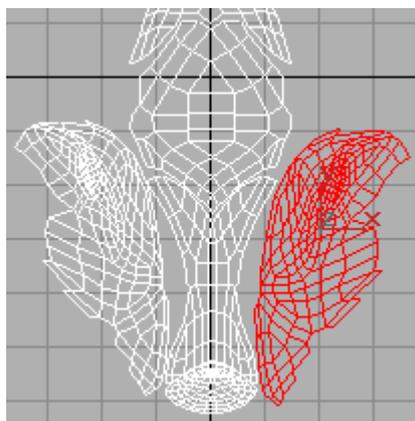
Uhuh! Now the reason you split the faces off is so you create extra verts at all the seams. Max - being a clever sort of program - knows where the edges of all collected faces are.



You can see the edges of the faces on the mesh. The smoothing does not cross unconnected face boundaries so they show up as hard edges. So even if you re-attach all the bits together it knows where the edges are, so all your hard work has not been undone. What it does mean is that you can select the shapes again - by cunningly using the connected

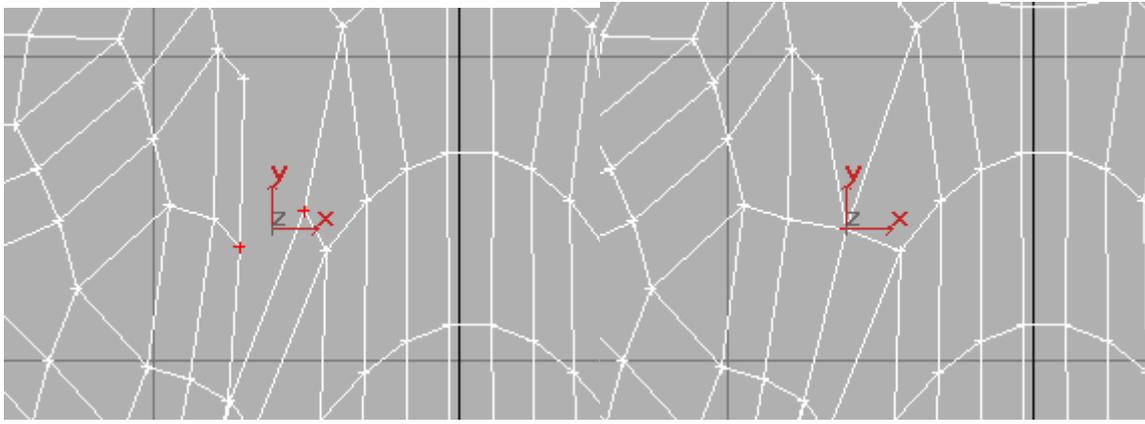
edges option in edit mesh. The button looks a bit like this -  - (well not a bit like this, EXACTLY like this)

**IMPORTANT BIT!:-** Right now, before anything, make a clone of your mesh and hide it. You're going to need it later on. You need to now move the groups of faces into a position that would be good to draw on. You must have a plan in your head as to how you're going to lay this whole thing out. If you built the mesh and are going to be doing the bitmap then this will be pretty logical.

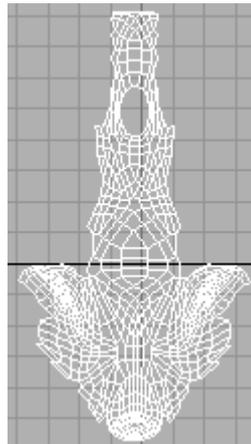


This is the way I laid out the head of my fella. You will notice that there are lots of gaps between the face groups. This is no good! it needs fixing. This new method of unwrapping you can move verts around and not pay the price - hooray!

You should be able to see the line of edges and the pairs of verts that need to meet up. It sometimes takes a while to spot them but it must be done. select the pair of verts that need to be together and do a non-uniform scale in X/Y   
(from the top, I always lay my meshes out from the top - but you could choose another plane if you like).

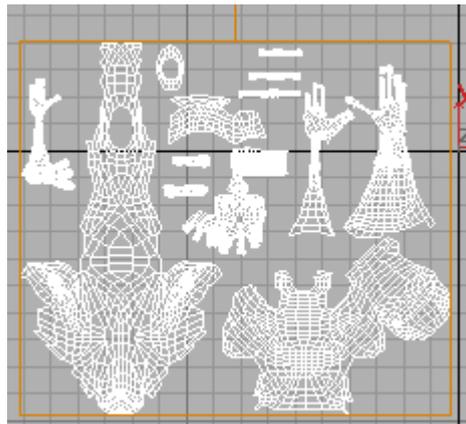


scale the verts until they meet, and because you scale around a common centre they end up exactly in the middle of the old positions. A good half way house.

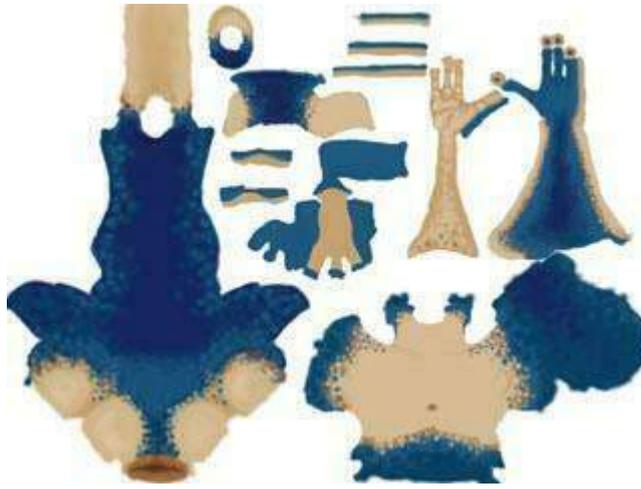


This is the final layout of the head, do the same to the rest of the mesh. Welcome to hell!, the second longest part of the job. **The owls are not what they seem.....**

When the whole model is laid out then you need to map it. Just use planar mapping.



You will see on the top left of this pic, that there is a clump of faces that seem not to be laid out. This is the left arm and leg. Because my pattern is the same on both sides I am going to clone these parts after I have mapped them, saves time on layout.



And this here's the map that is applied to the model. One map that's all, of course bump and specula maps can also be applied. **It's the end of the world as we know it....**

---

The next bit is the stroke of cunning (that, in my UTTER stupidity,, forgot in the first draft of this tut). Remember the copy of the wee fella that we made at the start of the tut?

good.....

Unhide it now and....wait for it..... morph the flat fella to the one you just unhid! The flat guy keeps all his mapping coords but forms back in to the shape he was before we squished him. The final thing to do is, when you're sure that you don't need to alter the mapping again, select all the verts in your mesh and weld them. If you leave the threshold at 0.1 then all verts that are in the same space will be welded together. The reason that you need to weld verts is because Max won't smooth across non-welded verts - but now you're free to re-smooth your mesh and get it lookin' all spangly again. And that's about it, it's a painstaking process but worth that wait in the end. I can't imagine doing it any other way. For low poly models it's really good, quick even! People who have upgraded to Max2 already might be saying, "But here's an unwrap modifier with Max2. We don't need your childish meddlings! Away with you". But to you I will say this, "have you tried using it???" It's good for just adjusting texture verts after applying the mapping but not much else - not yet anyway. Oh well, have fun (yeah right!) and do send in any creations that you make to me for display and fame (well no fame, just display)