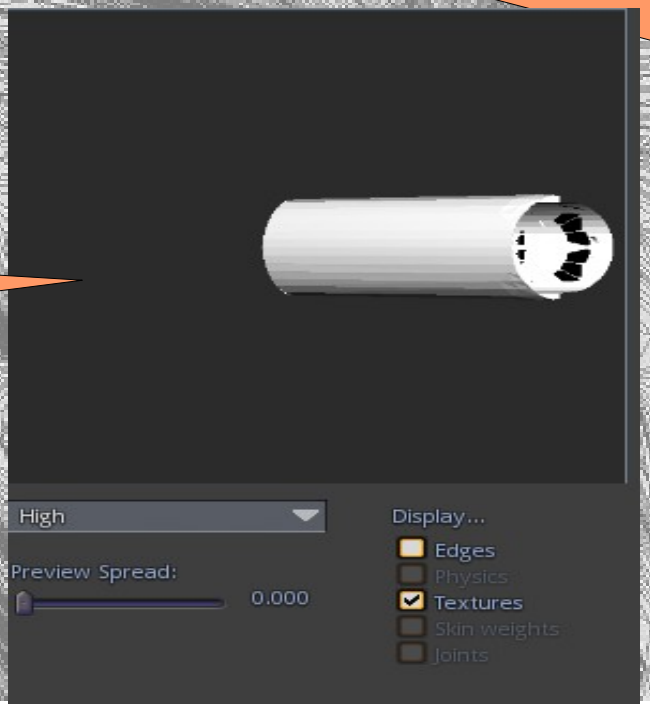
Mesh-Import
Material&UVmap

Hello I have tried an other mesh that give me problem.

Mesh-Import
Material&UVmap

Ok how did you do it.

I went to blender an imported that 3ds file. There was no normal problem so I went to export as dae.Look at the model I get in the little window



Far from a shuttle.

What is wrong.

Let me download it and see.

Mesh-Import

Yap that is what I see. Nothing wrong with the model. You have to scale it and add the doors in it . But all normal are fin as you can see.

Yap I see that . I also see that there is no texturing.

Well the texture file comes with it. But yes now that you tell me I dont see anything on the model. True!! Is there something I did wrong?!

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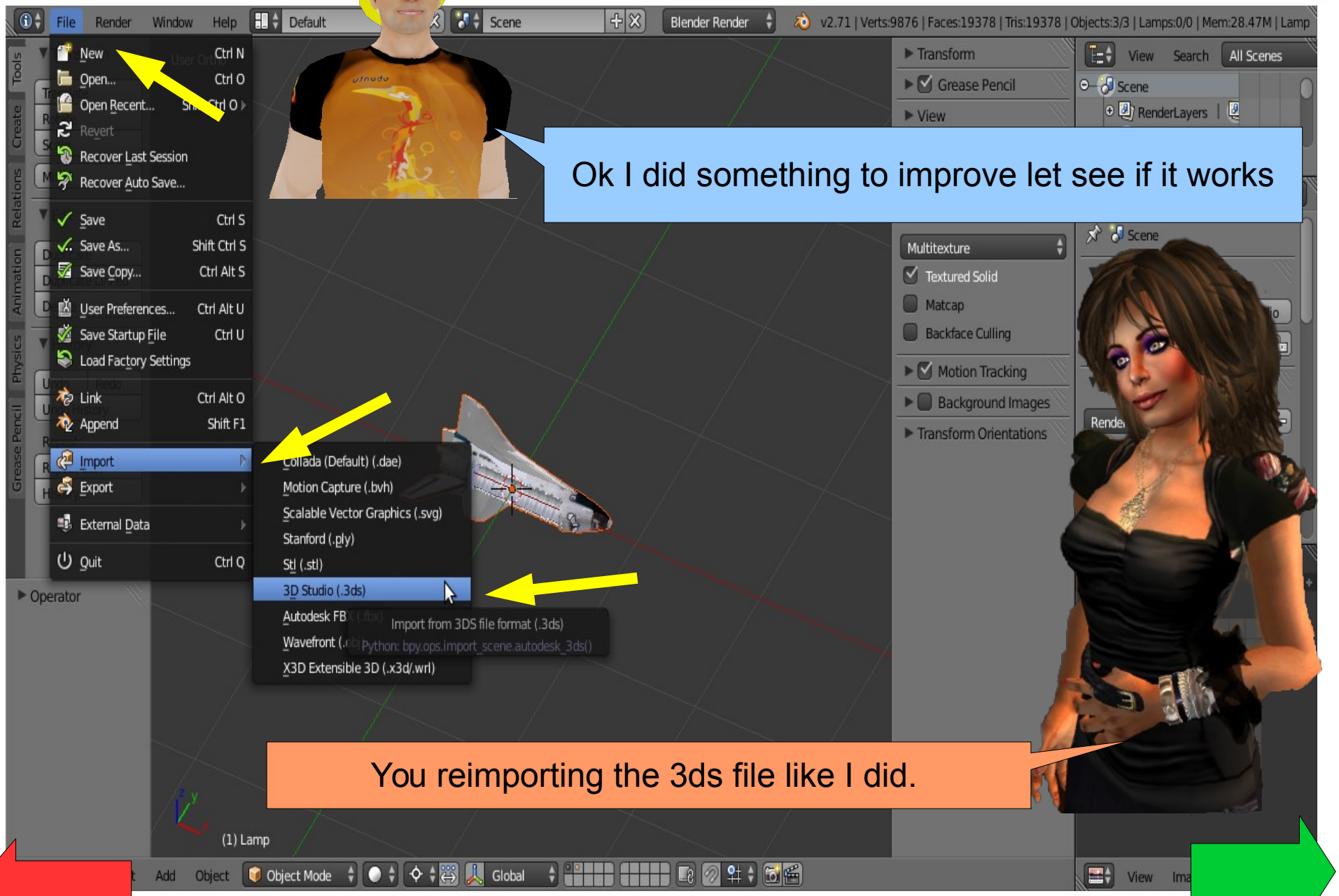

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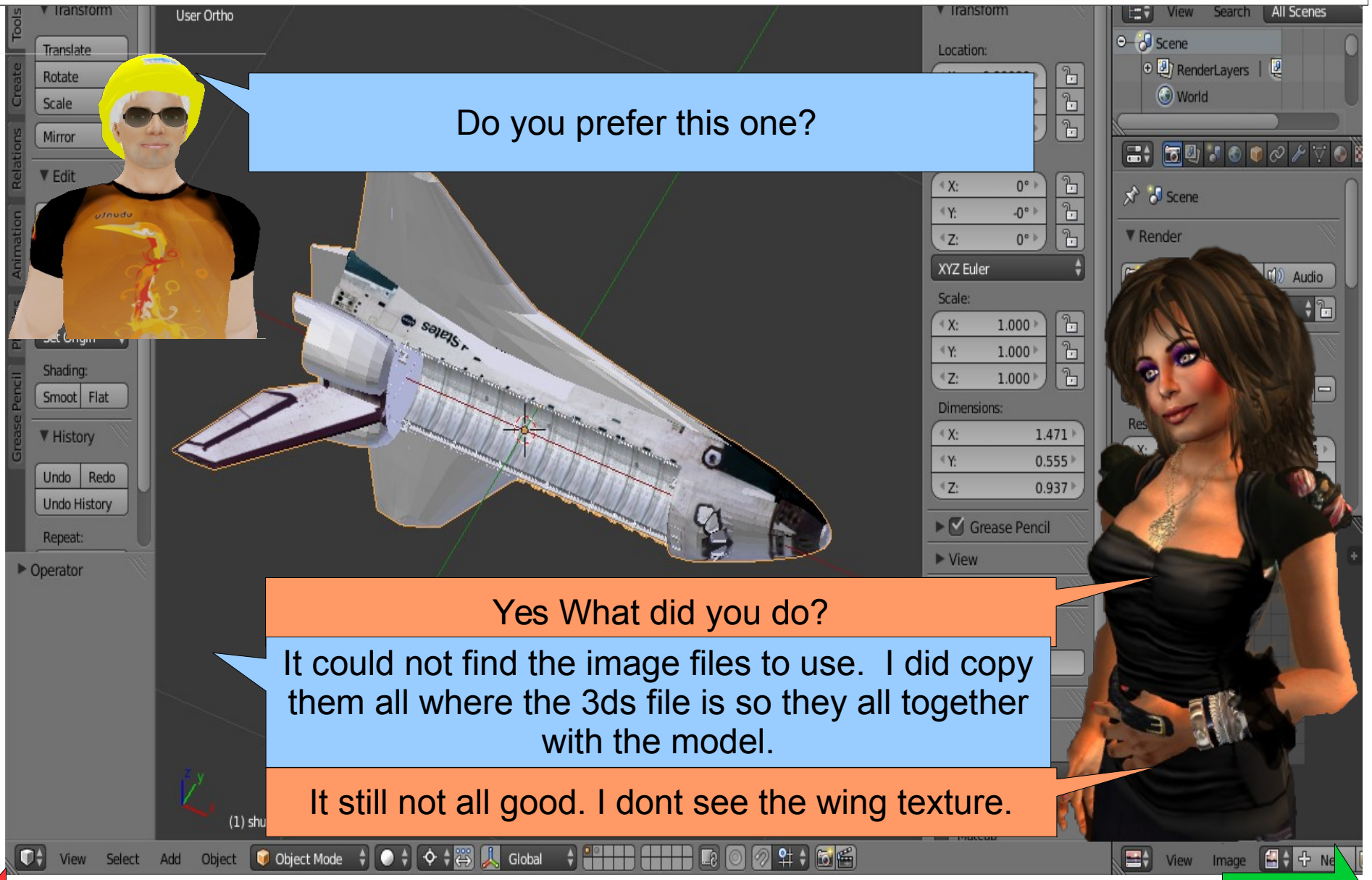

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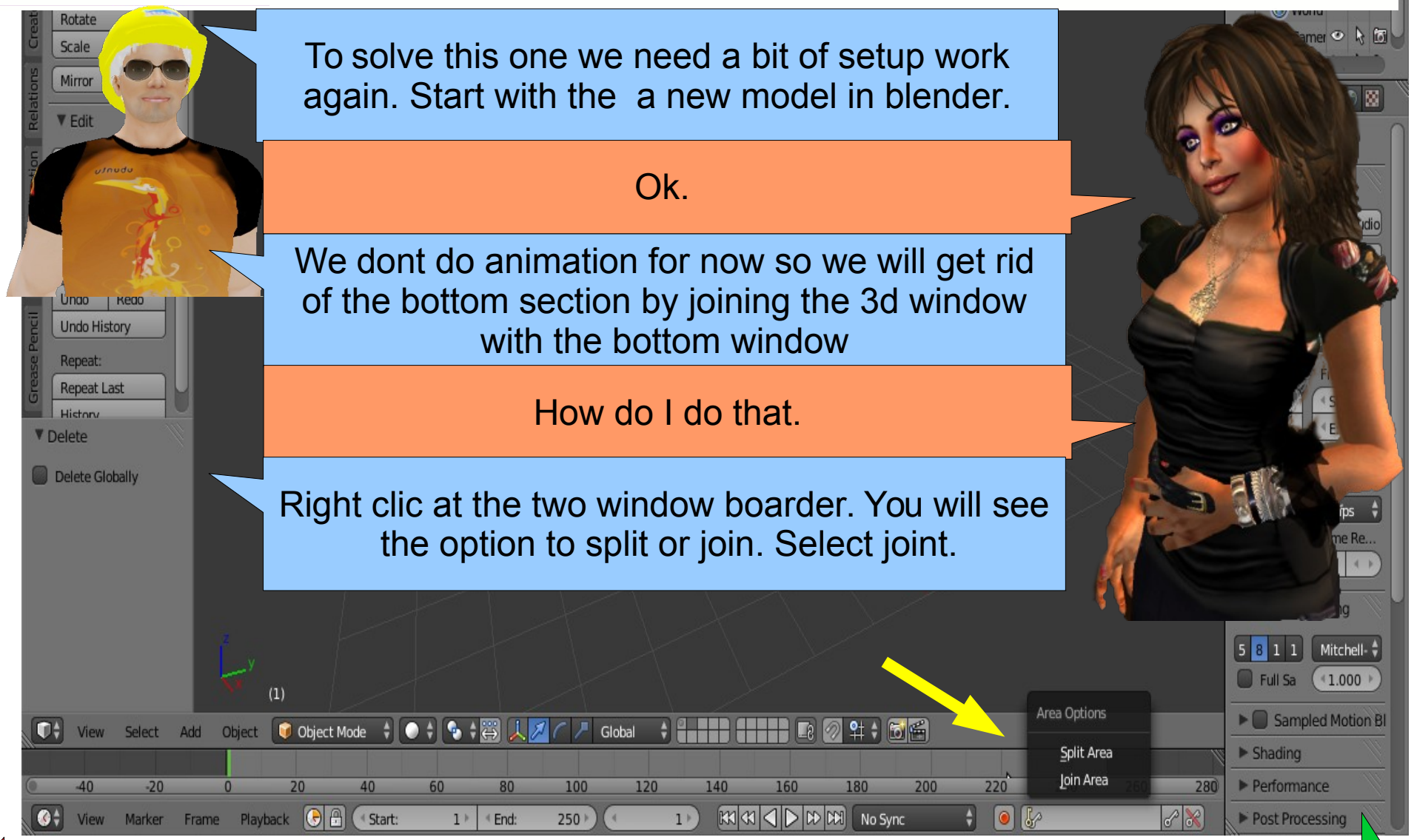

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Hovering your mouse over the bottom panel you will see a arrow down. Clic and its done.

The 3d window extended and the bottom is gone.

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We will add a UV window on the side panel. To do that locate your mouse at the boarder of the 3d panel and then right side to get the split option.

My mouse at the jonction of the right side panel. Ok

Hit split you will see a line appear. Just divide it like you feel for now its easy to adjust after.

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View all on the view panel will show a little grey rectangle.

Got that. I save this as my default now .

View All

View

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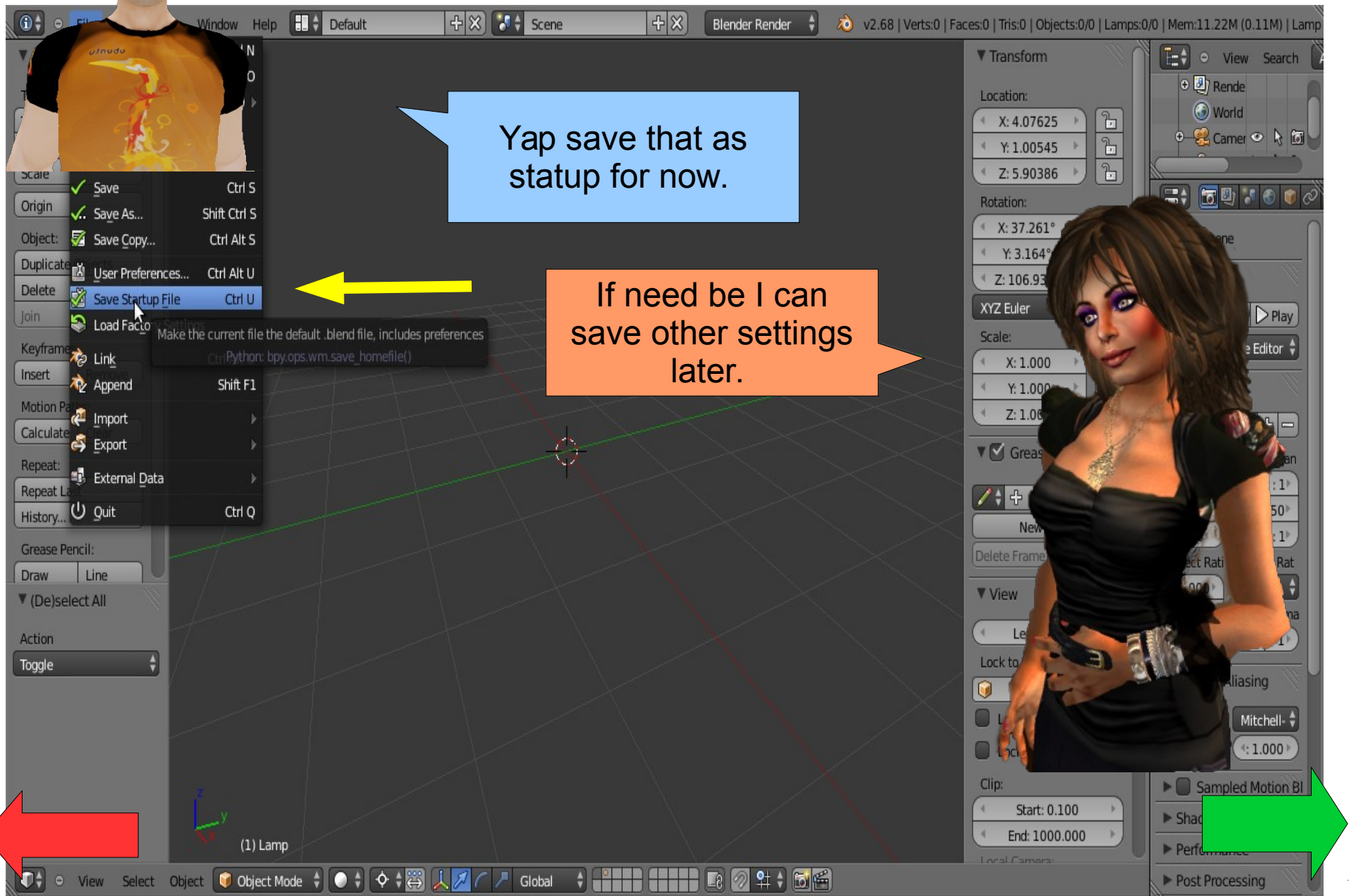

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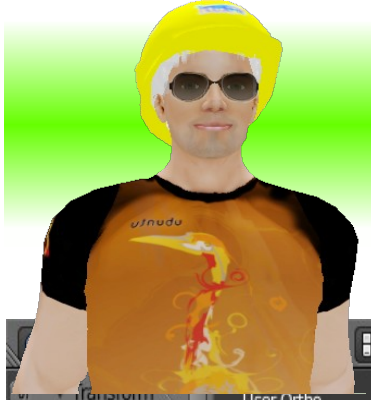

This is what you should see now after import in your new startup with texture file in same directory as 3ds model.

Yes with the new UV window in . This sound like its going to get complex.

Yes Uvmap and material understanding is a most if you want to get going in mesh importing. Cannot avoid that.

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Before you give up. Here is what you going to get if you stick in ….

LOL you got me hook-up :)

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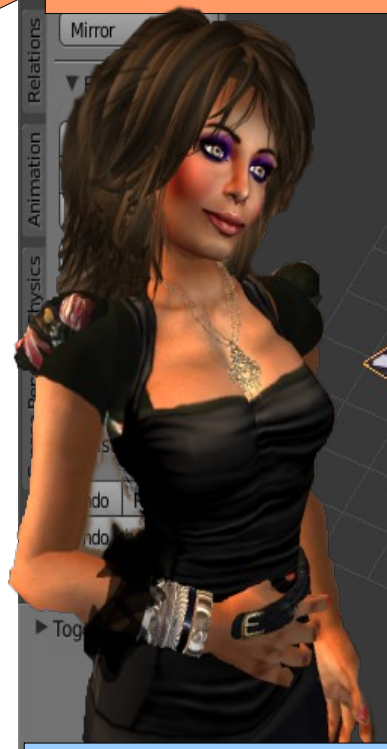
I scale it to 10x so it fit with the doors.



Look at how many materiel this SINGLE object has, I have enlarge the right side top window so you can see.

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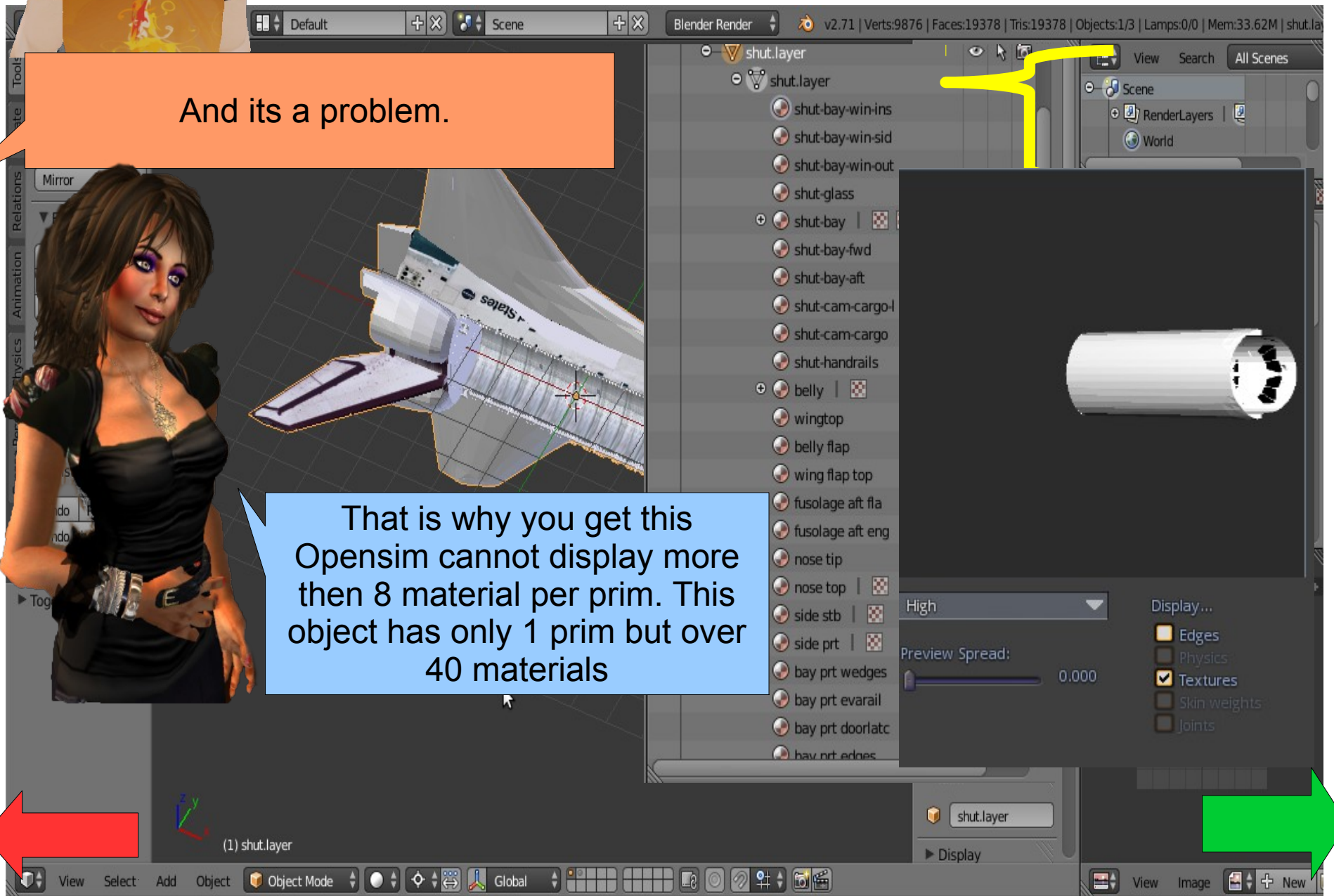
And its a problem.

That is why you get this Opensim cannot display more then 8 material per prim. This object has only 1 prim but over 40 materials



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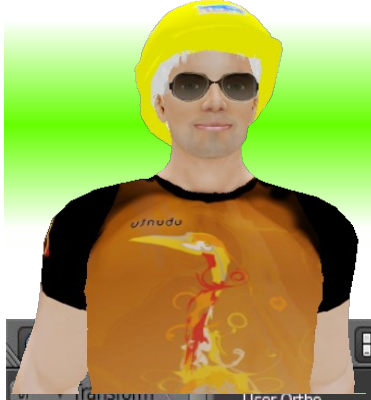

So what do we do?

With all the verticies 'a' selected in edit mode we separate the object in prims per material definition.

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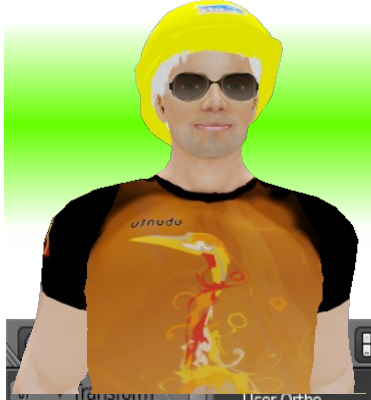

Back in object mode with 'a' to select all we can see that we have 50 prims (object) now

That is not bad is it.

Only file size and verticies total count realy matter.

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Select the wings in object mode and flip to edit mode. Then 'a' to select all mesh.

What is that at the bottom.

The Uvmap of that prim.

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Make sure you are in multitexture shading with texture solid. In Uvmap window

Ok check.

In the Uvpanel use image menu to open image and get wingtop the image to texture this prim face.

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You can work in the Upanel to zoom and pan same as 3d panel.

We have the wings in ... yeah

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Let take the problem area of the side of the shuttle. In object mode right clic the side of the shuttler to select that prim. Then edit mode use 'b' to select that area.

United State is reverse.

Yap we want to correct that see the uvmap on the right side is already showing the mapping of those mesh.

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Hover you mouse over the Uvpanel. Hit 'a' to select all verticies there. We going to scale them on 'x' only to mirror them . To do that hit 's' then 'x' then type in -1 and enter.

I see United State but not in correct position.

This will require a bit of your artistic eye. Hit 'g' to grab the verticies with you mouse still hovering over the UVpanel. Now drag your mouse while watching the 3dPanel. You will see the texture moving. Fit it the best you can see.

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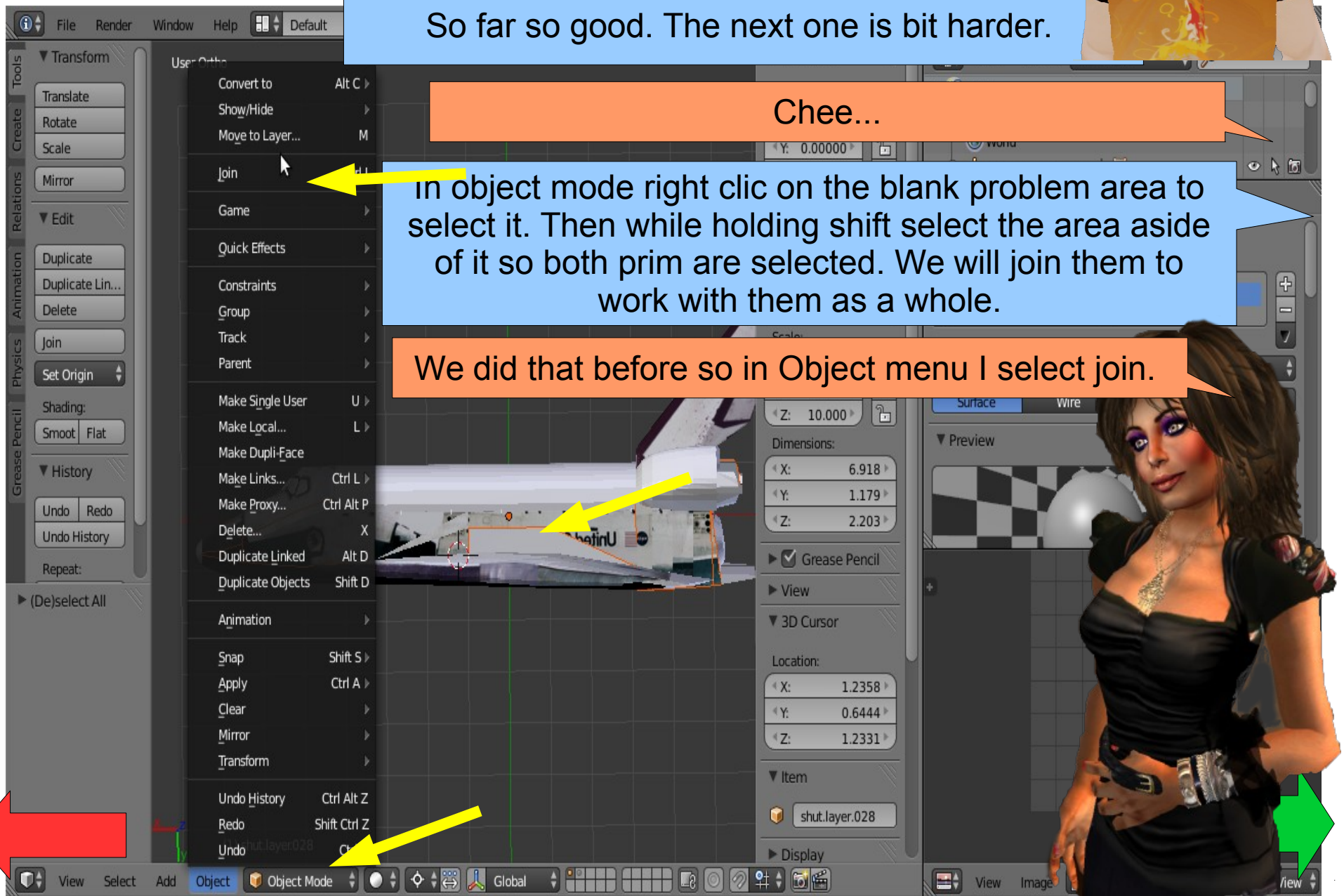
So far so good. The next one is bit harder.

Chee...

In object mode right clic on the blank problem area to select it. Then while holding shift select the area aside of it so both prim are selected. We will join them to work with them as a whole.

We did that before so in Object menu I select join.



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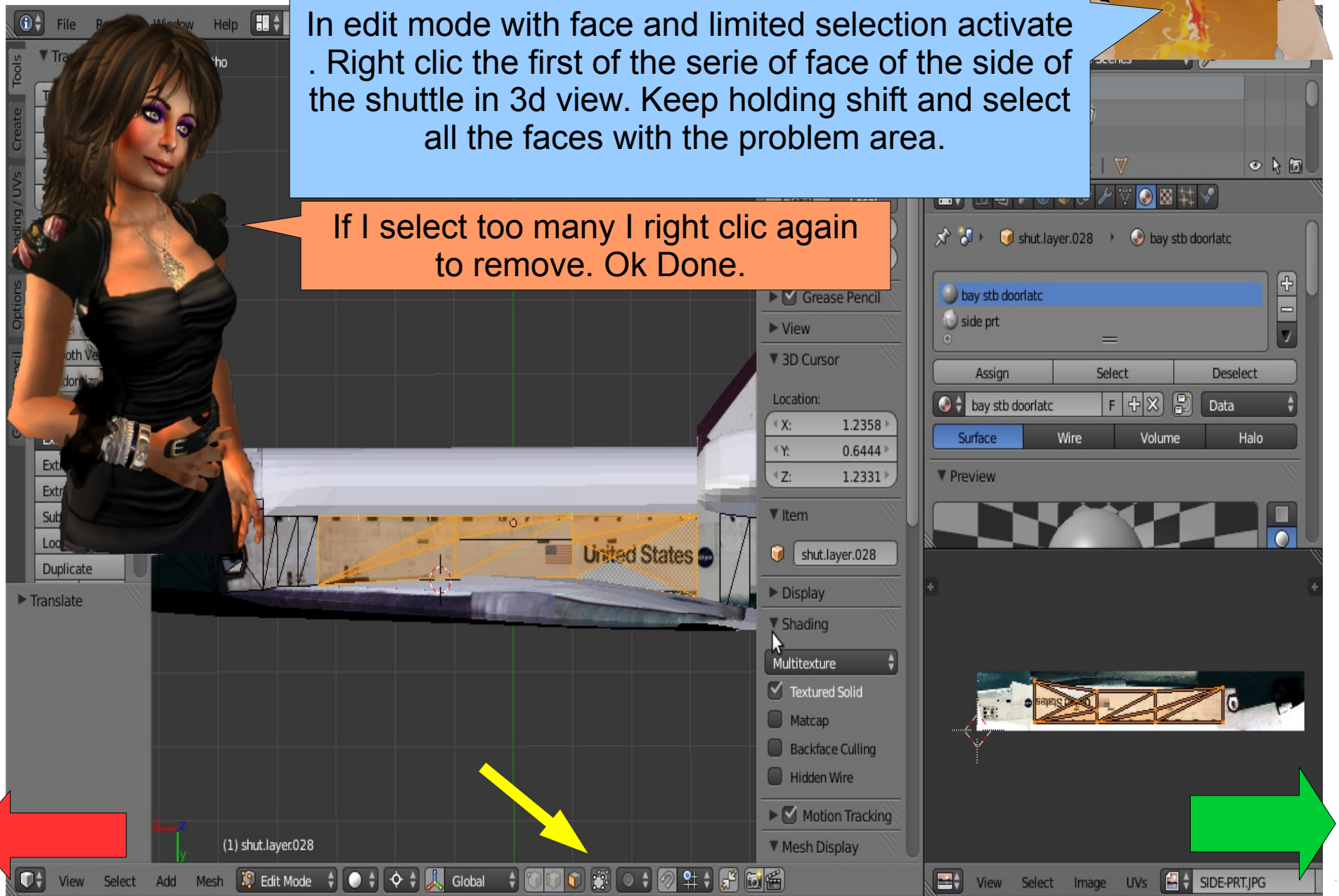
In edit mode with face and limited selection activate . Right clic the first of the serie of face of the side of the shuttle in 3d view. Keep holding shift and select all the faces with the problem area.

If I select too many I right clic again to remove. Ok Done.



Mesh-Import
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You going to do something fun and rather fundamental in 3d work. Make a uvprojection. That is transfer a 3d pattern to a fat 2d image.

Hope it does not hurt.... :)

Before we do this we have to make sure we square. Use view menu at the bottom of 3d panel and select top.

The shuttle is upside down!!

From mesh menu uvunwarp from projection from view.

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You rotate it back .

Yap after projection I prefer working upside down easier for the neck!!

I dont see the verticies in the uvpanel.

Hover your mouse on the uvpanel. Hit 'a' to select all verticies there and 's' 'x' -1 to scale it mirror. Then put your mouse pointer in the middle of the uvpanel and hit 's' and drag the mouse to scale is up to proper size so it fits with the surrounding and enter when happy.

Tricky but I got it...

Be patient we are almost there. While hovering over the center of Uvpanel with mouse hit 'g' and drag the mouse to position the texture appropriately

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Export Data Options:
- Apply Modifiers: View
- Selection Only
- Include Children
- Include Armatures
- Include Shape Keys

Texture Options:
- Only Active UV layer
- Include UV Textures
- Include Material Textures
- Copy

Armature Options:
- Deform Bones only
- Export for OpenSim

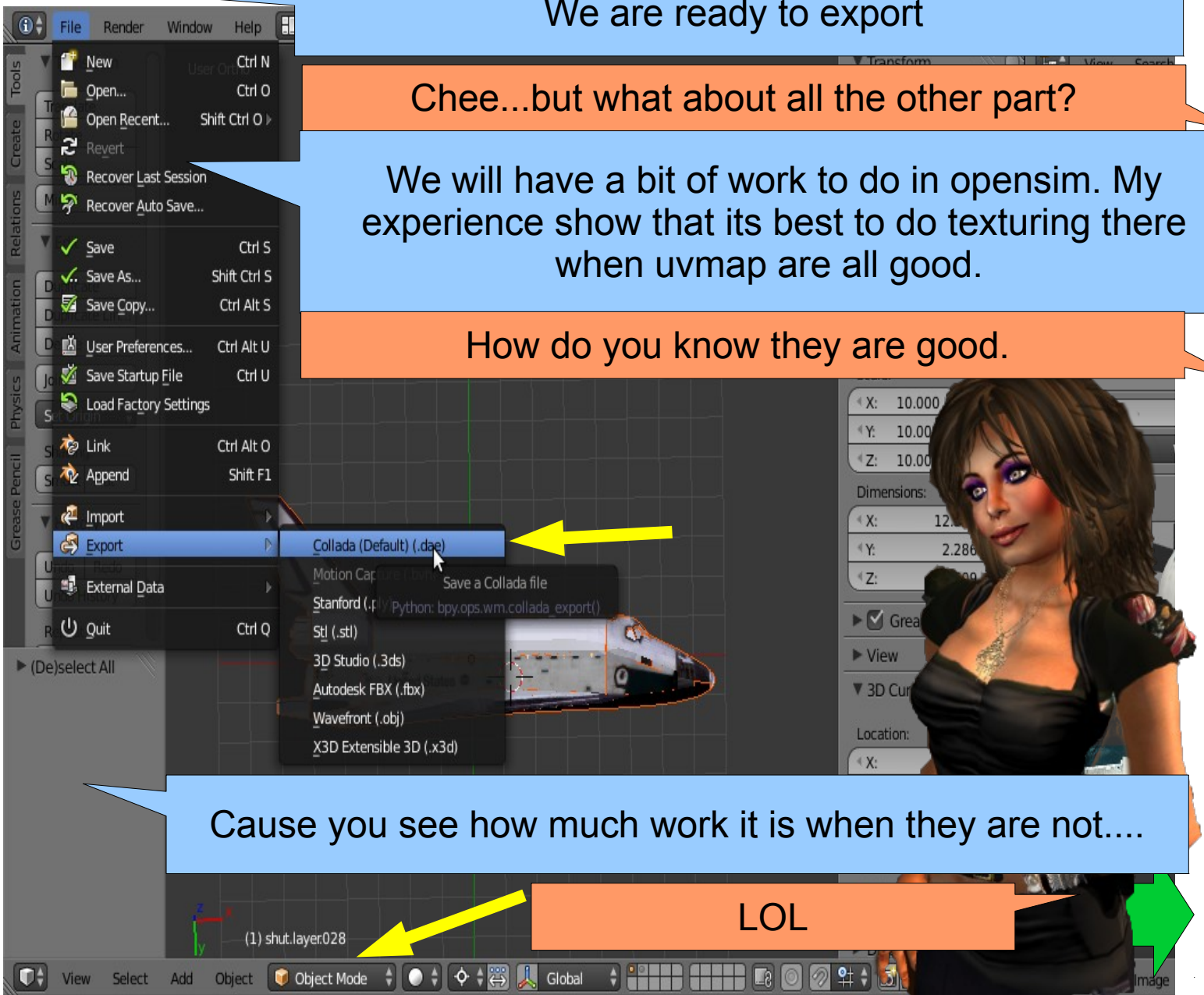
Collada Options:
- Triangulate
- Use Object Instances
- Transformation Type: Matrix
- Sort by Object name

We are ready to export

Chee...but what about all the other part?

We will have a bit of work to do in opensim. My experience show that its best to do texturing there when uvmap are all good.

How do you know they are good.



Cause you see how much work it is when they are not....

LOL

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In Opensim the image is much better then it was. Yeah...

Yap. Accept all default here.

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Here I load lowest and analyze

Upload Model

Model name:

shuttle2a

This model represents:

Preview:

Level of Detail | Physics | Upload options

Lowest

Browse...

Quality:

Default

Smooth:

Close Holes

Analyze

Passes:

Detail scale:

0.000

Simplify

Yes

Vertices: 1495,

Hulls: 403

High

Display...

Edges

Physics

Textures

Preview Spread:

0.000

Calculate weights & fee

Cancel

Clear settings & reset form

Upload fee: OS$ TBD Land impact: TBD Download: TBD Physics: TBD Server: TBD

Price Breakdown: Streaming: OS$ TBD Physics: OS$ TBD Instances: OS$ TBD Textures: OS$ TBD Model: OS$ T

Mesh-Import
Material&UVmap

Upload Model

Model name:

shuttle2a

This model represents

Preview:

Scale is good what about the texture.

Level of Detail | Physics | Upload options

Scale (1 = no scaling):

Dimensions: 14.711 X 5.554 X 9.370

Include textures

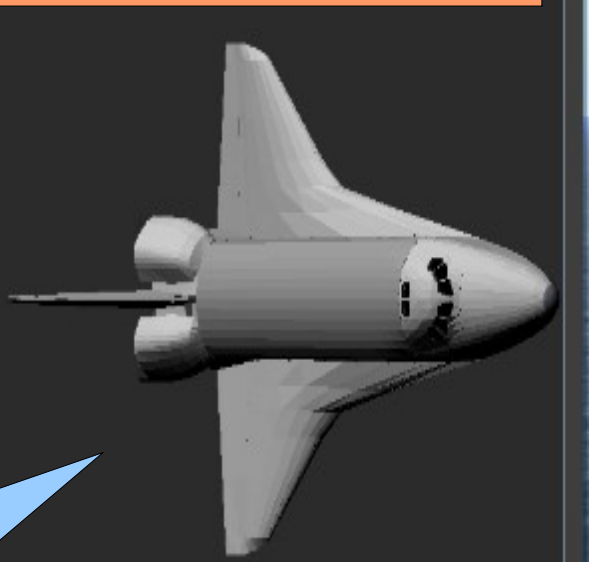
For avatar models only:

Include skin weight

Include joint positions

or lower avatar): 0.000

We did not export any we will have to do that manually



High

Display...

Edges

Physics

Textures

Preview Spread: 0.000

Calculate weights & fee | Cancel | Clear settings & reset form

Upload fee: OS$ TBD Land impact: TBD Download: TBD Physics: TBD Server: TBD

Price Breakdown: Streaming: OS$ TBD Physics: OS$ TBD Instances: OS$ TBD Textures: OS$ TBD Model: OS$ T

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Nice but not what you show me... ?!?

We still have a bit of work to do in opensim. I think its easier here in my opinion.

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I have downloaded the wingtop.

Just slid it over your wing. It should fit nicely.

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I have the two sides.

Do the same slide them on each side they will fit in place. You can dowload the one you need in bulk if you like.

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After a bit of trial and error I got it done . Yeah. That was some work ....

Yap but great learning opportunity is it not.?

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SUMMARY:

- We learn that a prim in opensim cannot have more then 8 faces = material.
- The object we want to upload has 40 material in an object of one prim exceeding that limit.
- Solution is to seprate the object and the easiest is to use the material division of meshes for that object.
- In 3ds import that model did not carry texture. Moving the texture from the texture folder to the directory where the model file is help but not totaly.
- We had to relink uvmaps with texture material. Instread of doing that in blender we keep this for later in opensim.
- We did repair mapping of the side panel and uv projected the mesh from view. Then scale it and rotate it to map the model with the texture.
- We did not do any optimisation of the model as this would require a carefull watch of the uvmaping we did not perform.
- In opensima we downloaded the DAE model and the texture separatly and manualy matched the two.
- A bit of trial an error made it into a nice shuttle craft to enjoye.

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