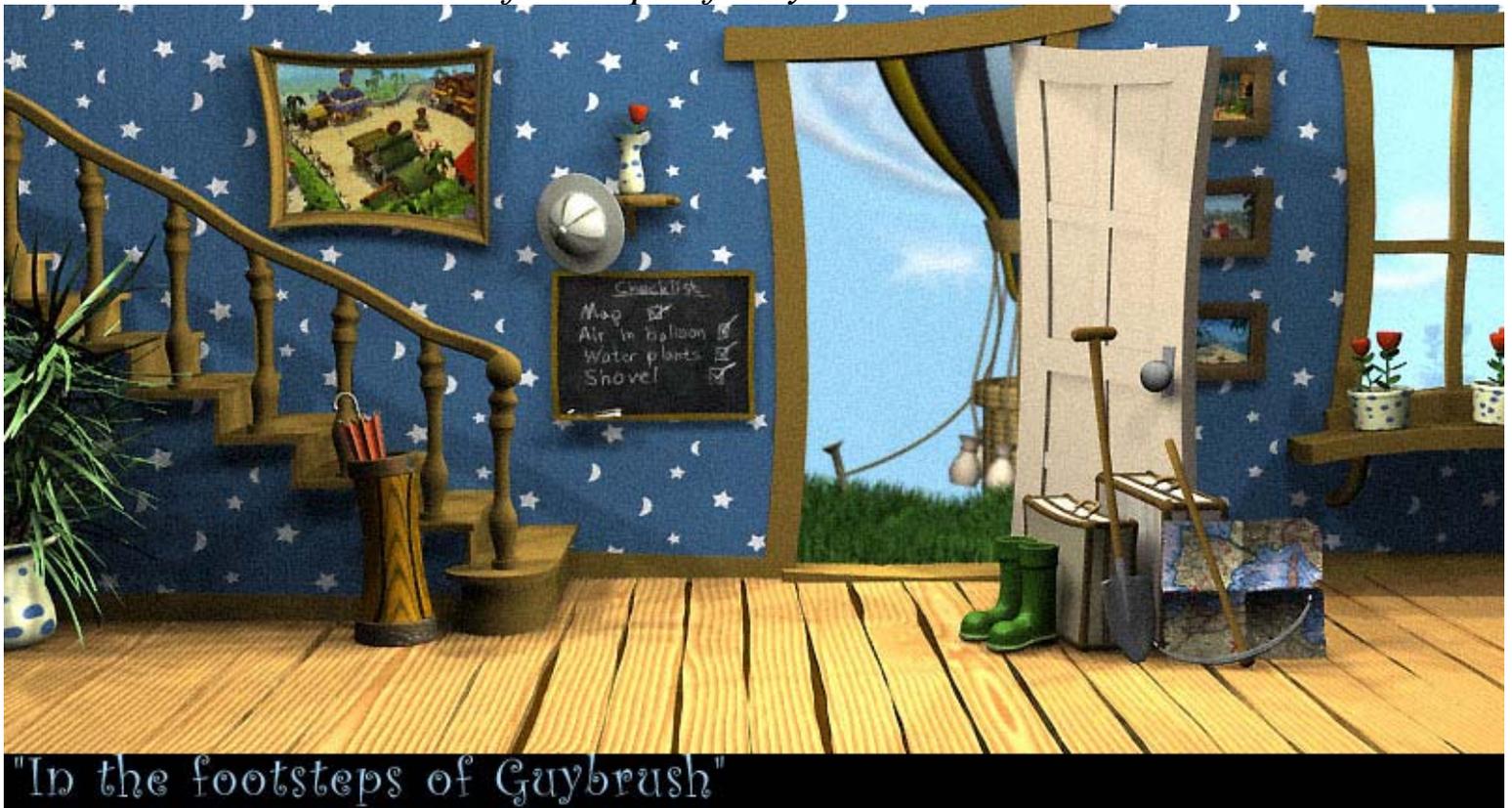


In the footsteps of Guybrush – Tutorial



"In the footsteps of Guybrush"

First I'd like to thank everyone that administrated, participated and voted in this contest. Just like last time I had great fun doing my piece :-)

The tutorial is written for 3ds max R3&R4 but some ideas might be useful for general purposes. If you got any questions just mail them to me at dhammarin@hotmail.com.

Brainstorming

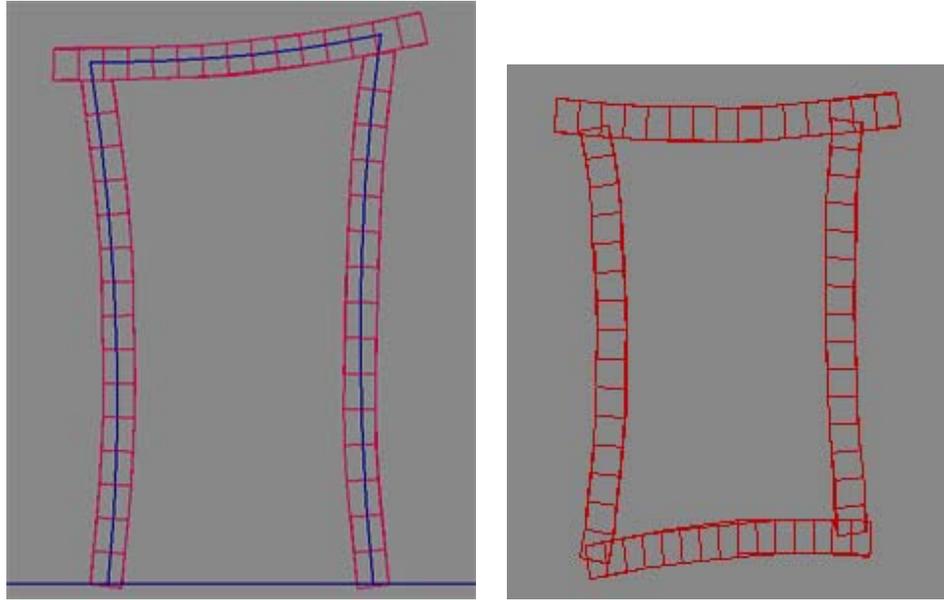
"The journey" ... Hmm ... At first I drew a complete blank on this topic. But after a while I decided to make some kind of traveler or adventurer, and who is the greatest adventurer ... Guybrush Threepwood! I've played all the Monkey Island games and really love them. The cartoon-ish style they represent is so great. I wanted to do something like that but not a complete rip-off. The idea of a fresh adventurer going on a journey in the footsteps of his hero then came to mind and I went with that.



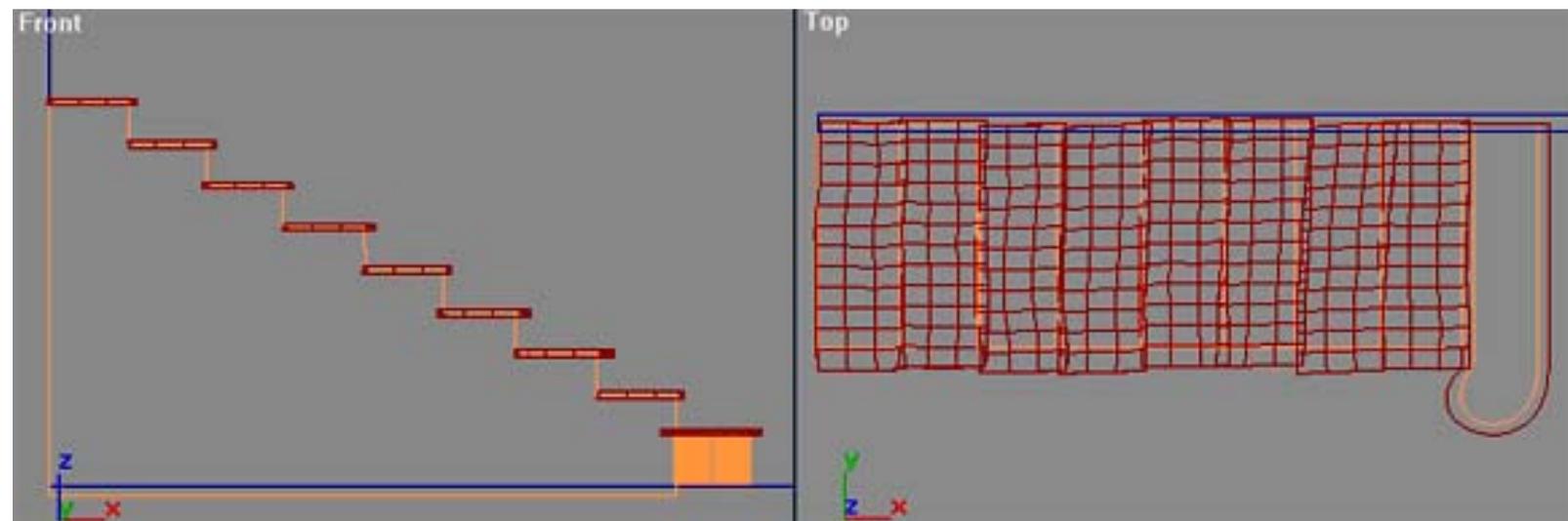
I started with a rough sketch of the main objects, door, stairs, window, adventuring-stuff. (Note : I cant draw a decent thing by hand even if my life depended on it .. hehe).

Main objects

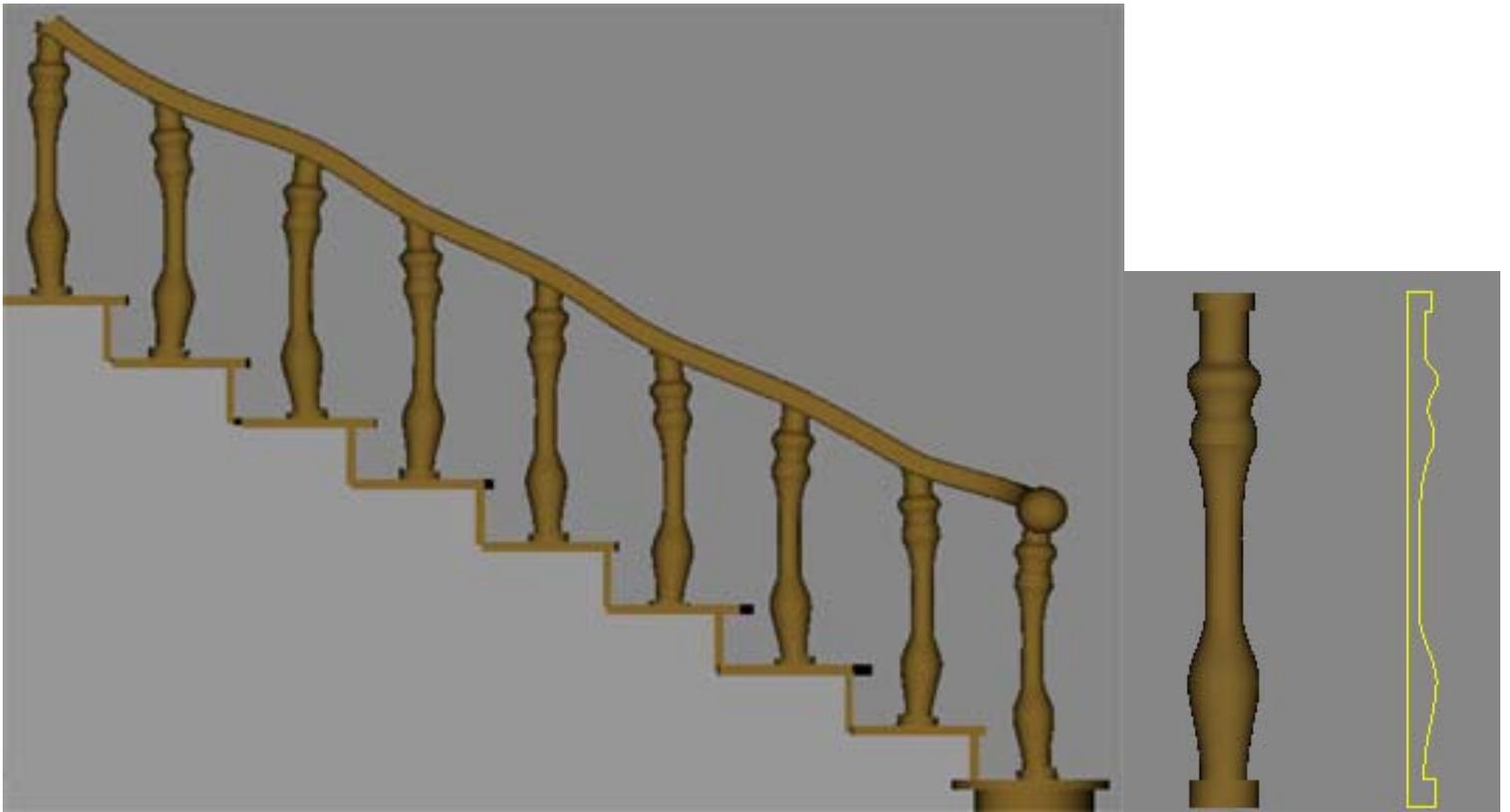
The center of the scene is the doorway through which the journey will begin ... I started with that and the window. They are both made of bent boxes with a noise modifier. I wanted everything in this scene to be curved and irregular to add to the cartoon-ish look.



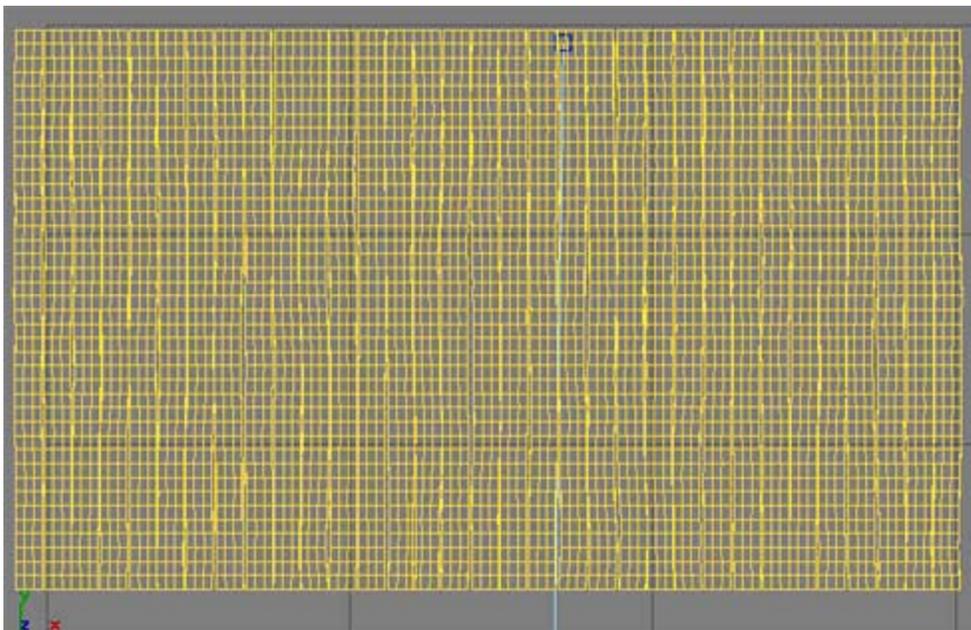
Each step of the stairs is a box with a noise modifier (each one with a unique seed) except for the last step which is an extruded shape. The side of the stairs is an extruded shape too.



The banister is just a lathed shape with a slight bend (in different directions) and on top of them I lofted a rectangle with chamfer corners along a spine. I ended it with just a regular sphere. Lathing is always nice for cylindrical objects but you got to be careful with the polycount. Don't use more steps on the spines than you have to and not more segments in the lathe than you need.



For the floor I created each individual board as a box with noise-modifier. Different seeds on the noise to make them look unique. The boxes needed quite a lot of segments to look realistic so the floor got kind of heavy on faces.



It's time to sum up the scene so far. The environment is all set and looks like this. Now I could start adding things to the scene for detail.



I modeled most of the additional objects separately and imported them to the scene. It was hard to do all the stuff in the same "cartoon-ish look" but I tried to just keep everything simple. There would be no close-ups so I could get away with quite low detail on the objects.

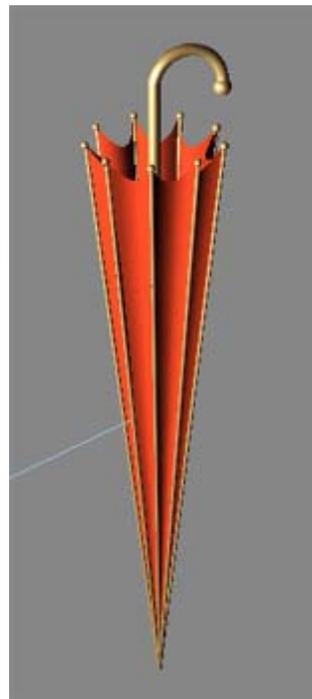
Adding all the stuff

First I did the plant in the left corner. The pot is a lathed shape. I lofted some spines for the branches and scattered a bent plane on them. The scatter might not be the best method when you want things on such a thin cylindrical object but sufficient for this. It's important that you move the pivot of the plane to its bottom so the planes will be placed so they "point outwards" from the branches.



The second object was the door. It's just made from bent boxes, very easy. I managed to bend the boxes so they fit in the doorway (so the door can actually close if you wish to).

Next up was the umbrella. Very simple too. A couple of cylinders with a sphere at the end were arranged to make the umbrella's "skeleton". As the center-stick I used regular cylinder with a bend-modifier. The bend was limited to the upper part of the cylinder. I then used a quad-patch as the "skin" of the umbrella. Patches are nice if you want a curved surface so I pulled on the Bezier-handles for awhile until I was happy. (Note : look what would happened if the umbrella were to be opened ... uh oh)



The umbrella is placed in a .. eh .. "umbrella-holder". It too is made from a lathed spline (!!). And of course a bend modifier was added at the end. I did the texture for it at the same time.

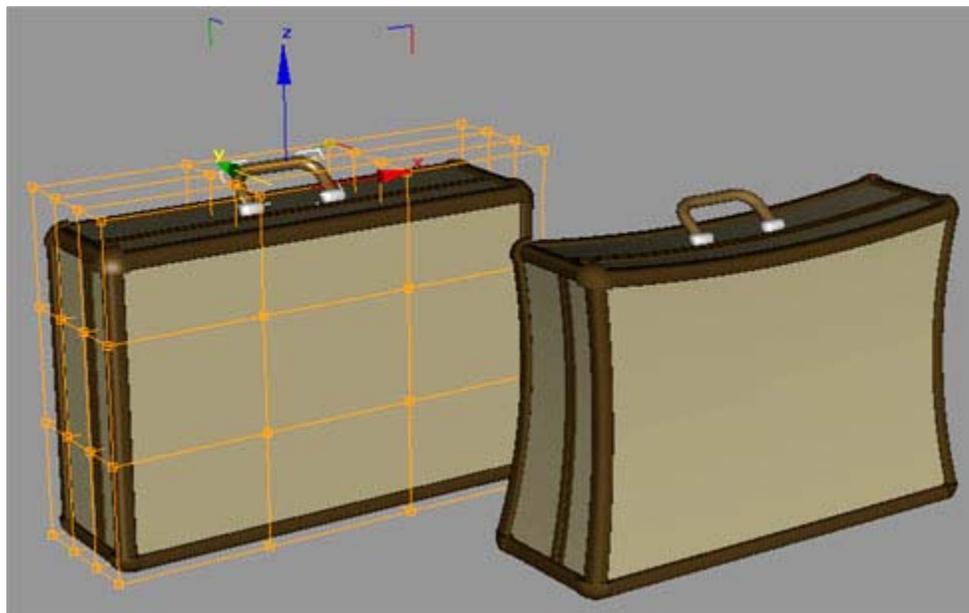


The suitcases are made of a lot of extruded shapes that makes up "borders" around a box. The corner-things are chopped spheres. The detail is pretty low on the suitcase since they will be view from a distance. The handle is a loft. I extruded all the shapes with a lot of segments to make it easy to pull, squish and bend the suitcase later.

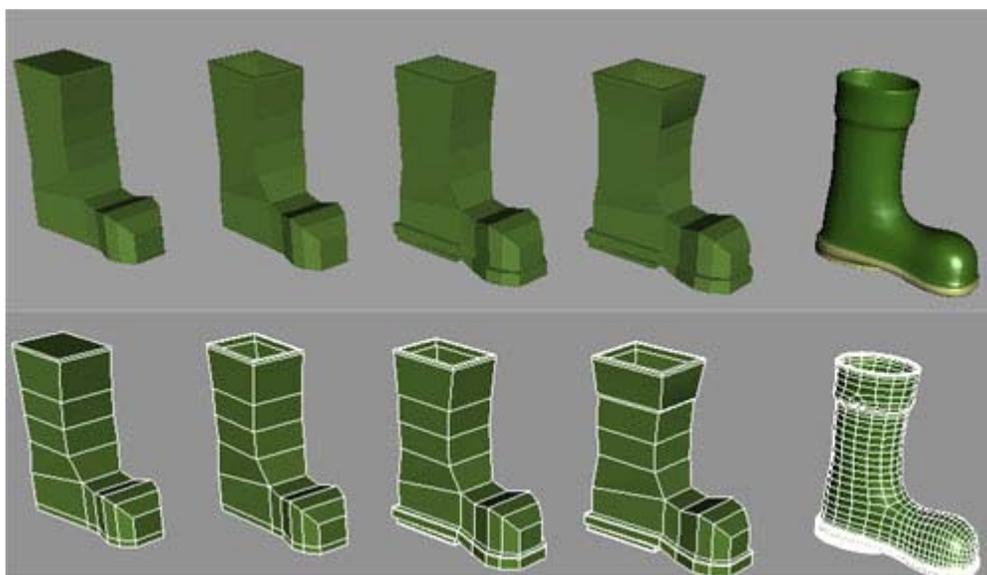
When the suitcase was done I applied a 4x4x4 FFD-modifier to the whole case. I pulled a bit on the middle controlpoints to get a more "funny" look on the case.

I kept the original shape for the large suitcase and the "curved" one for the smaller one. This made them looks less alike although they are just copies of each other.

The case with FFD-modifier, before and after :

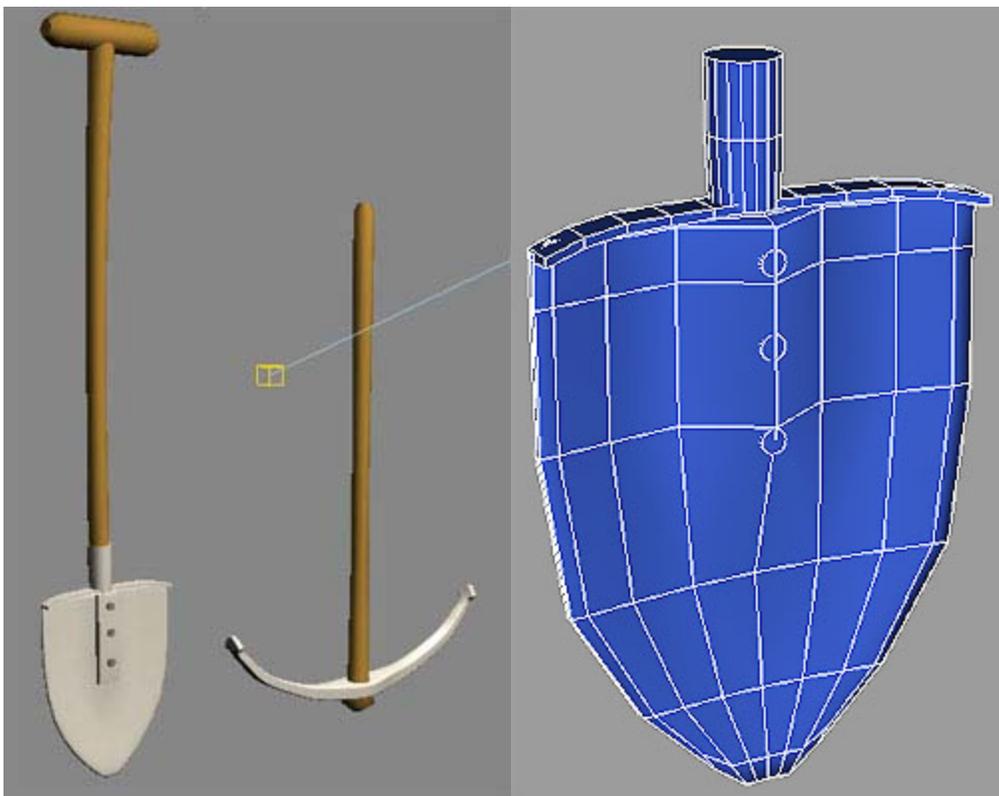


The boots are made with good honest box-modeling. Not much to say about them, just started with a box and started to extrude. Small extrudes (i.e. lots of faces) where you want much detail or sharp edges. The boots aren't made with a proper inside, they are just hollow a bit down for looks.

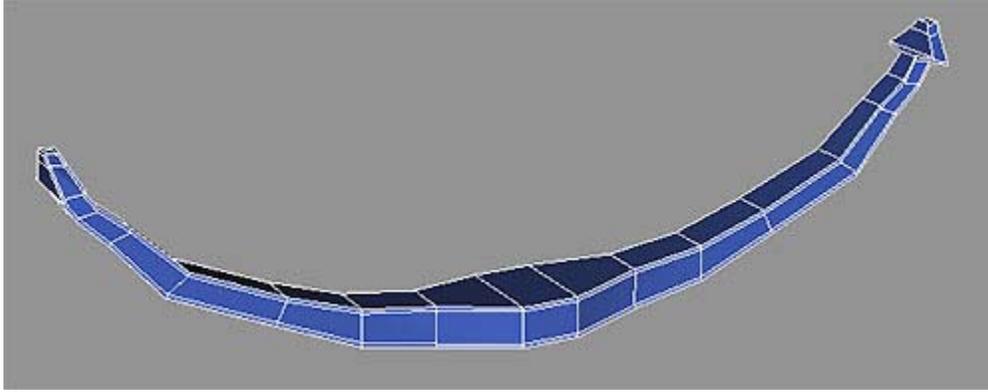


A simple texture painted in Photoshop with the help from the excellent plug-in [Texporter](#). The boot was painted green and the sole brownish-yellowish.

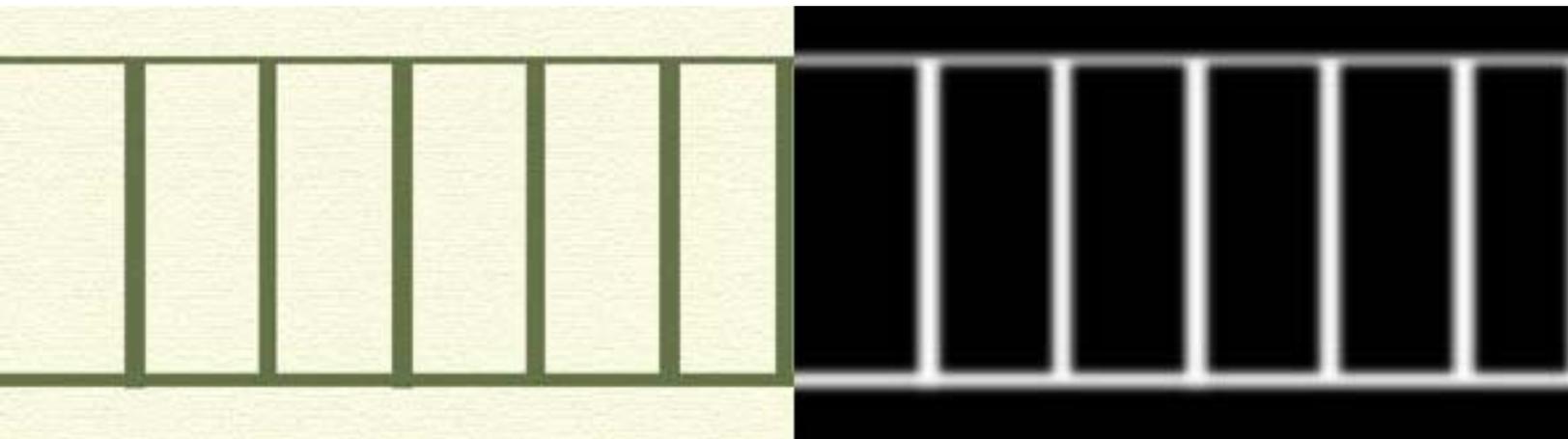
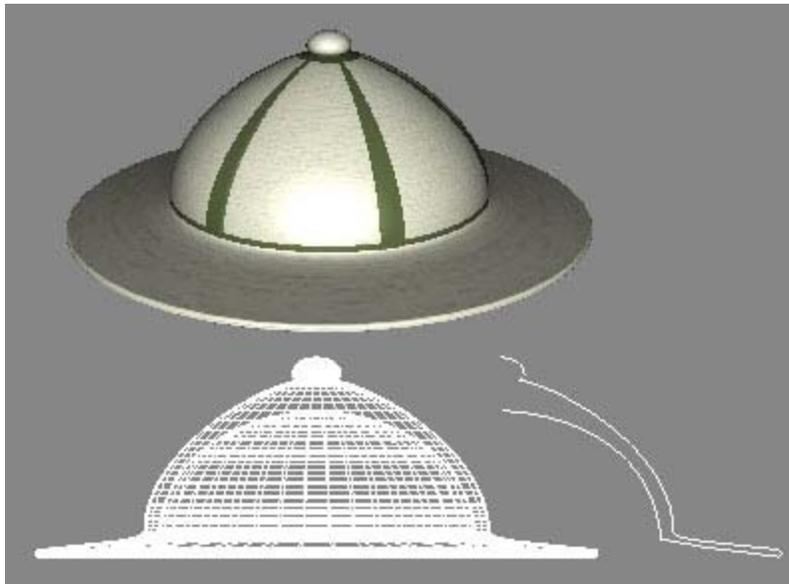
What do you need for a treasure-hunt? Pick-axe and shovel of course ... The "shovel-part" of the shovel is box modeled and the shaft is just two cylinders. Not much detail here either because of the viewing distance.



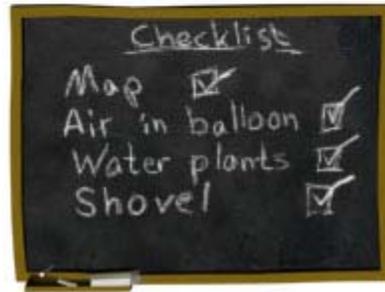
The same thing goes for the pick-axe. Box modeling for the "hacking-part" and a cylinder for the shaft. There were no texture-maps used on either of those two. Just a plain brown blinn material for the wooden parts and a bit more specular grey material for the metal parts.



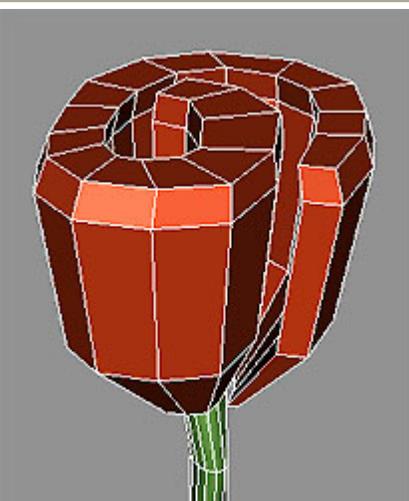
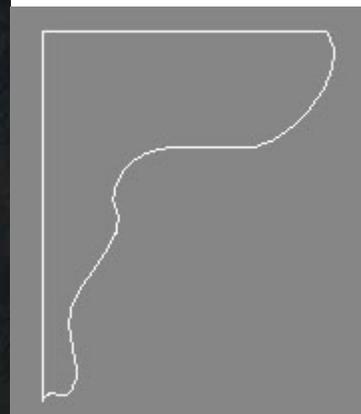
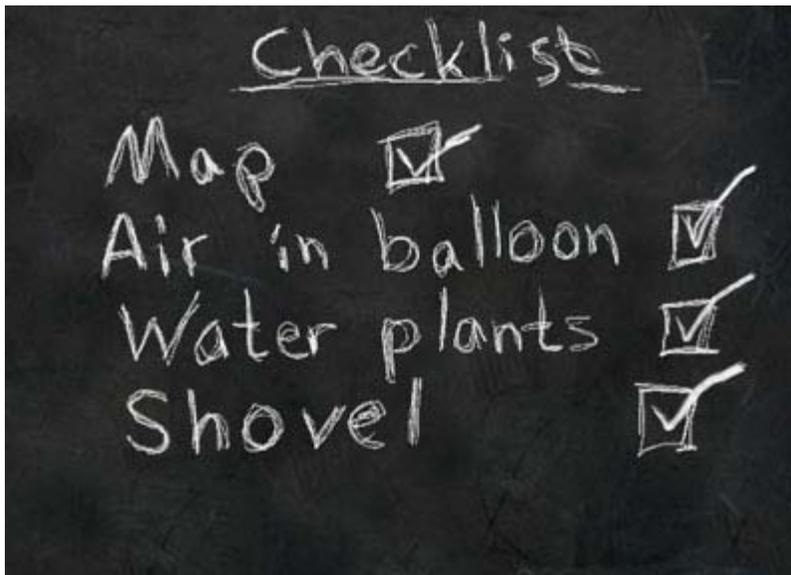
You'll need a good hat when adventuring too ... The tropical-hat is just a lathed shape. Very easy. I used Textporter to make a simple map both for the stripes and to use for bump-map.



Our hero has a lot of pictures and paintings of his big hero Guybrush Threepwood on the walls. I used some screenshots from the Monkey Island games and put them in nice frames.



The frame on the big painting is an extruded spline that looks like this. The checklist is painted in Photoshop, I started with a black area and smudged it with some white to make it look like an erased chalkboard. Then I just wrote on it with my Wacom tablet and pen. I think it looks very close to a real chalkboard.



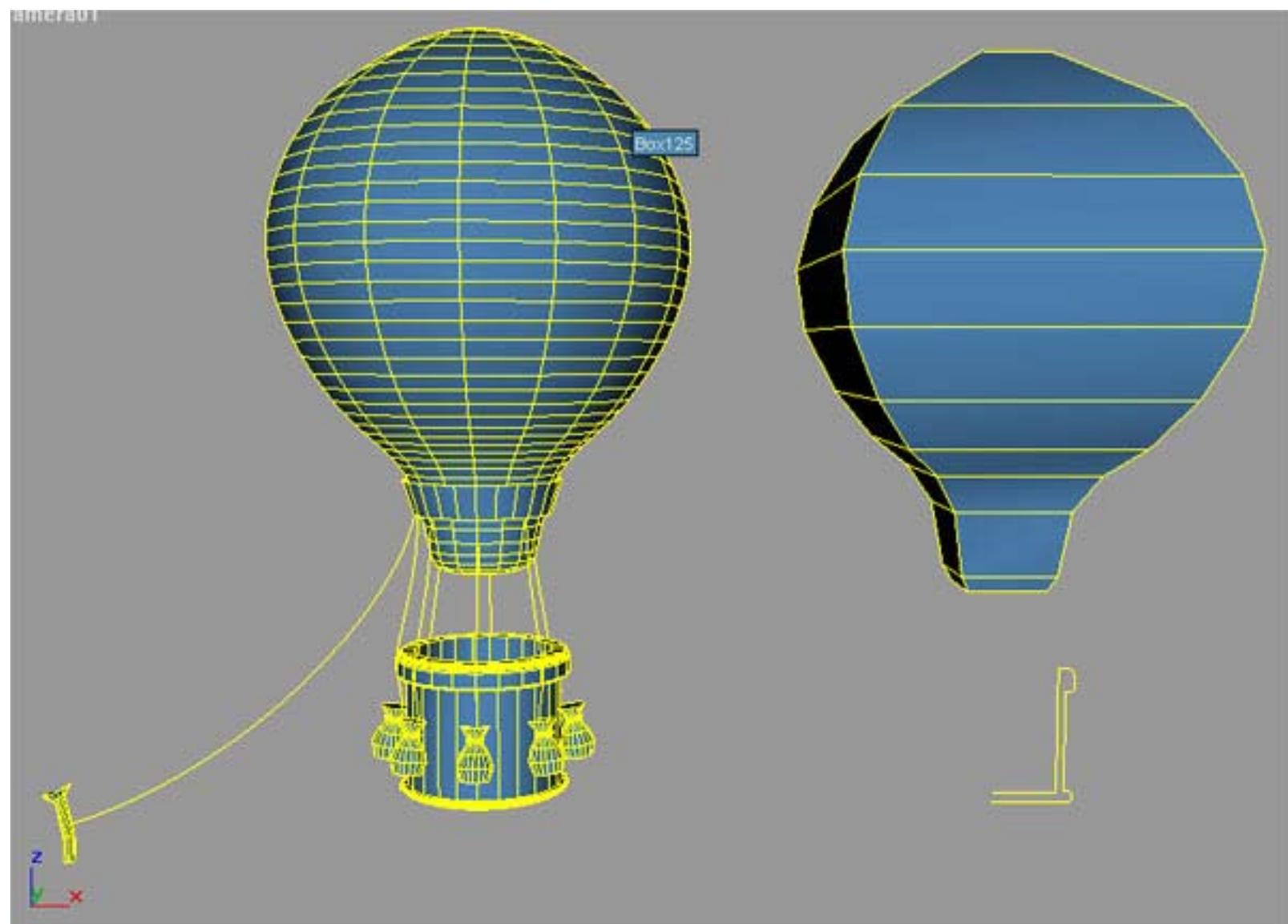
The flowers are all the same model, just rotated a bit. I started with a box with three height segments. Then started to extrude the three faces and poked around with the vertices, extruded, poked, extruded, poked ... until the mesh had a spiral shape.

Then I scaled the bottom and upper vertices in towards the middle of the flower. The bottom ones more than the upper.

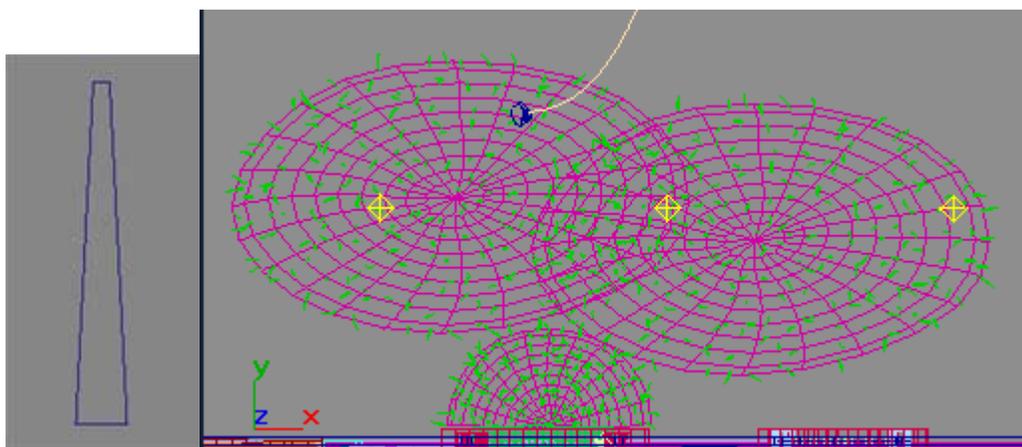
The stem is just a cylinder with a noise-modifier. The leaves are regular boxes with FFD-modifiers to get the right form. The pot is a lathed shape with very few segments. I applied meshsmooth to everything and was quite happy ... a nice set of cartoon-ish flowers.



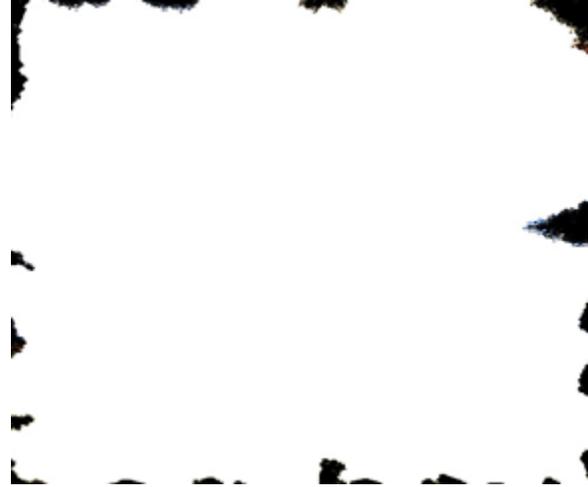
The balloon was originally planned to be seen far away in the distance with a long path leading to it. I later decided that it might be easier if the adventurer lived on a high cliff with his balloon right outside ... like ordinary people have their car in the driveway right outside the door. The balloon is pretty low on detail too just a lathed shape for the basket and the balloon is a box with some pulled segments and a meshsmooth. Some splines make up the ropes and some modified cylinders the sandbags (ballast?).



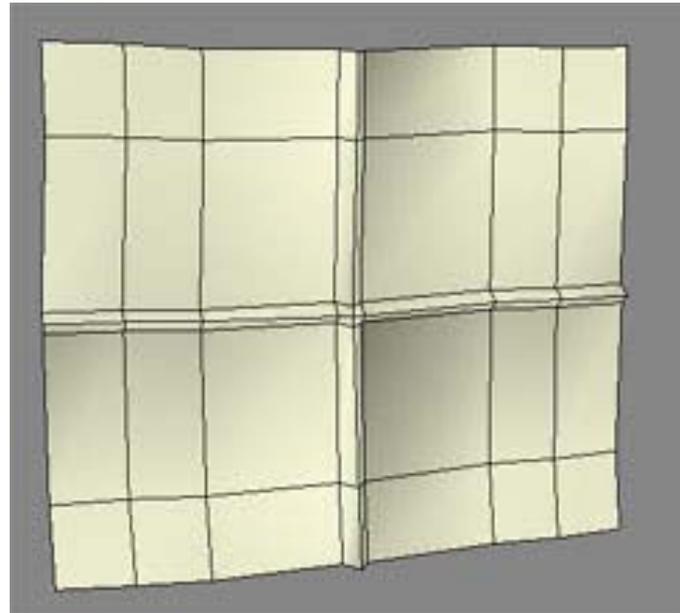
The little part of his garden you actually see outside the door I used three half-spheres that's been squished so they are just a bit rounded (almost flat). I then scattered this plane onto them. About 9000 objects all together (3000 on each sphere). The setting I used for Transformation was Rotation : X=20, Y=20, Z=360 degrees Scaling : X=Y=Z=30% Scatter at random faces.



Last object will be the little treasure map, I just made a plane and pulled on some faces to make it look like it's been folded a lot of times and added noise modifier. I found this map on the net and filled the borders with some color and drew a trail the adventurer to follow. Then applied this mask for opacity.

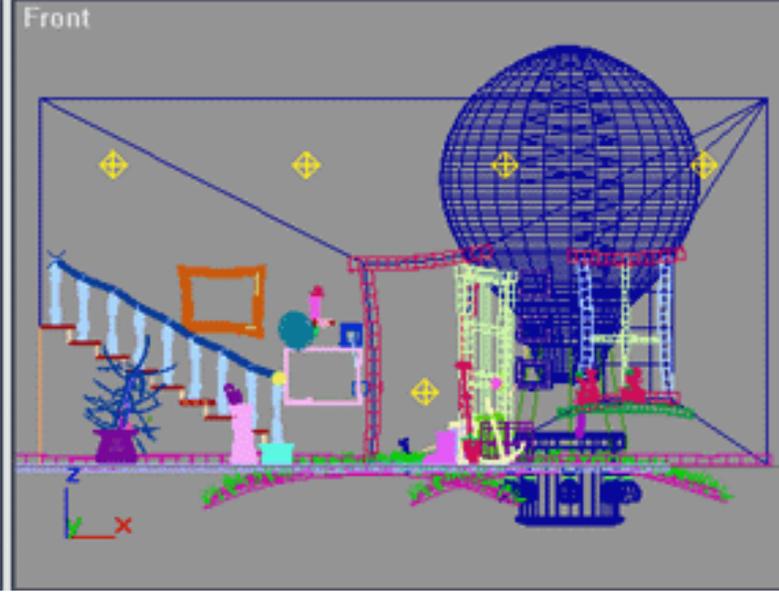
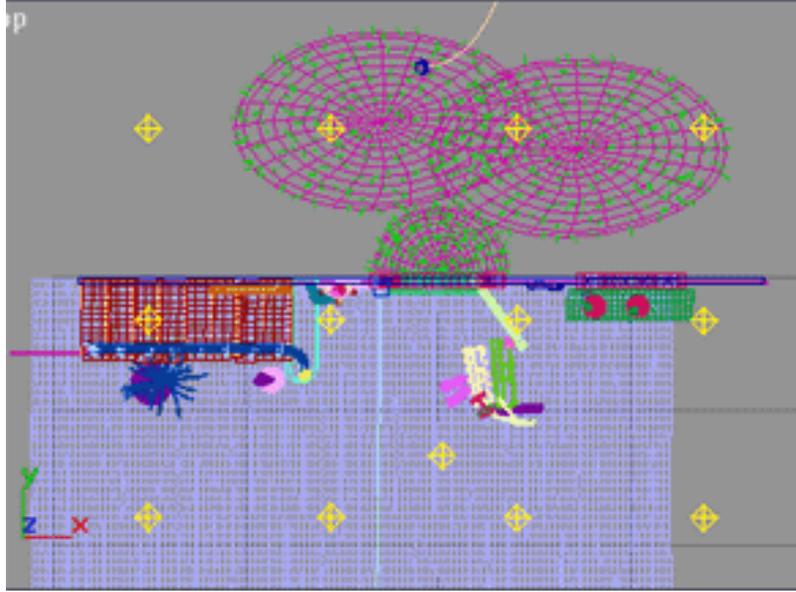


The map in a shaded view :



Texturing and Lights

The scene has 13 lights. 12 of them are placed to act like outdoor and indoor lights. These lights are Omnis with a very low multiplier=0,24 , casts shadows, a slight blue tint to so simulate the sky. To get smooth and soft shadows I turned down the Map Size to 400 and set the Sample Range to 6,0 in the Shadow-Map Parameters. The last light is an omni too used to cast some more light over the stuff at the door. Light setup:



This setup light the room like this:



These are the textures I used for the rest of the objects. Very simple ones drawn in Photoshop except for the wood that I found on the net.



All the grass, flowers and wood (except the floor) are standard blinn materials with just a diffuse color.

Rendering and Touching up

When the scene was all set for rendering it had 333 objects, 13 lights and about 350 000 faces. Render time was only a couple of minutes. I used this picture for the background; I painted some clouds in the area seen through the door and window.

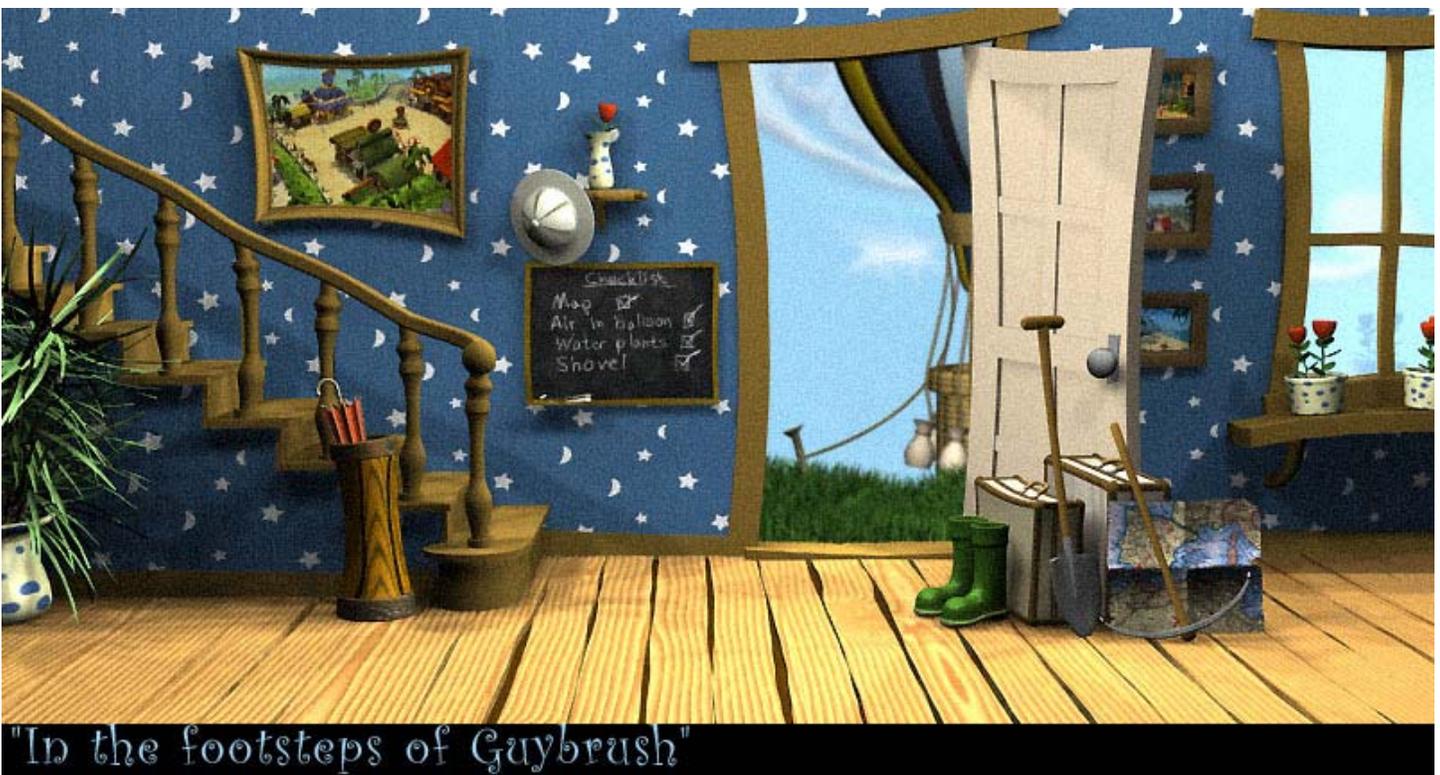


I also rendered this mask to use later ... Everything was given a white self-illuminative material, all this outside the door was removed and a black background was used.



In Photoshop I used the mask to apply some blur to the things outside the door to give a little depth-of-field effect. Secondly I applied a grain-filter and a sharpen edges-filter to get a good and final cartoon-ish look.

Final Result :



Conclusion and tips

That's about it .. more pictures than words in this tutorial I guess. Hope you learned something useful :-)
My tips on making a scene like this would be "Be simple" and "Use different noise seeds". Even a simple scene can be great if you just work a bit with what you got. Take time to try out different lighting-setups, a good lighting can really add a lot to a scene. Make your own textures, don't use the standard ones. If you make them yourself you can make them all match each other and bring a nice harmony to the scene.

Use the noise modifier a lot ... that really brings a lot of detail to the scene. If you apply a different seed on every noise you got, you can make every object unique. If you make use of all these things the modeling isn't the most important part anymore. So what if you aren't a total modeling pro, make your scene out of boxes, extruded shapes and other primitives, you can make it look good with other means :-)

That's all for me! Thanks for reading and go back to creating now!!