

Pixel art rendering with 3ds Max and Mental Ray

(Version:1.0)

Big thanks to [sharecg](#) and skudman for the model. This tutorial is for 3ds Max and Mental Ray. It is about rendering a character with very low resolution because of the hardware (iPhone developing) and style. To finish this tut you must be familiar with 3ds Max.

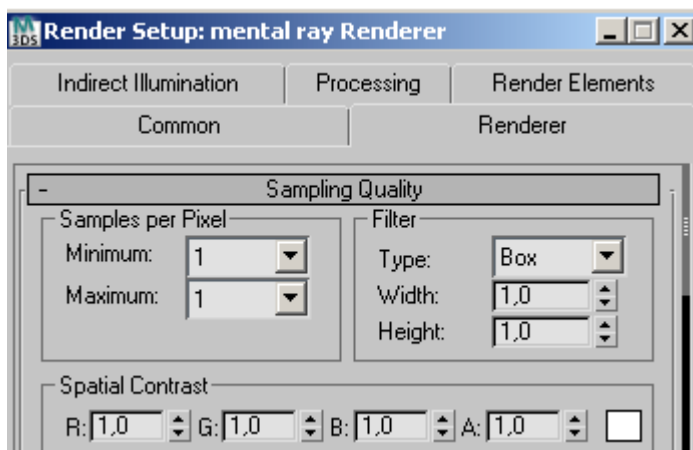
Every game design document contains an art document with all art directions. After the style is defined and you want to have only pixel artworks or pixel sprites or whatever. A lot of us make the graphics with a 2d tool because of workflow.

I think the better choice is a 3d tool like 3ds Max because you are very flexible with texturing, lighting, animating,....

The biggest problem are renderings like this:



(This pic has only one big problem. IT IS TOO BLURRY. That means I used the wrong antialiasing/ sampling.)



(OK, these are my settings)

Sampling per pixel: Minimum value defines on which pixel Mental Ray (MR) will work.

1/4 -> every fourth pixel

1 -> every pixel

4 -> every pixel *4

Maximum value gives more subdivisions to a sample

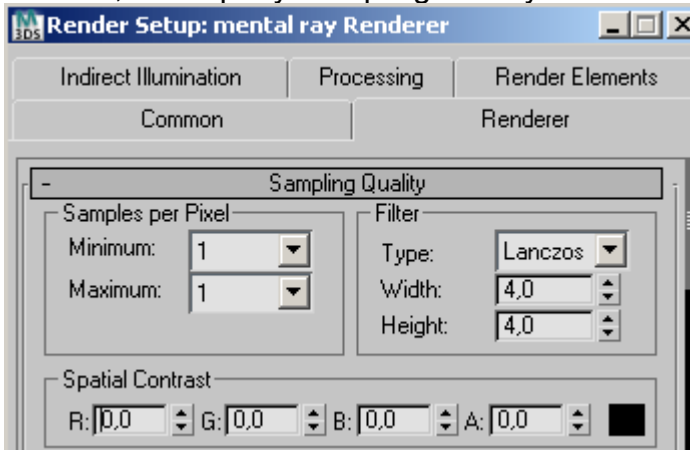
// We need the values 1 and 1. To fix every pixel with one colour.

Filter: Filters define the details. Box makes a very blurry pic. Gauss is a better one, and so on... Lanczos makes the sharpest antialiasing.
// For our fin rendering we take the Lanczos filter.

Spatial Contrast: This parameters are something like colourthreshold. If MR find two different pixel with high RGB values it will recursive sampling.

//I think I take 0,0,0 because it will sample everything.

All in all, I setup my Sampling Quality like this:



And my picture looks pretty well, now.



Ok, I hope it was a nice introduction to Sampling Quality of MR and 3ds Max. Moreover I think it is possible to organize all graphics creations for iPhone with a 3d software. At the moment I need only a rig to make very fast animations, render them out and put all the stuff into xcode 😊

thx and cheers
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