5.8.4.10 Modeling - Modifiers - Generate - Remesh Modifier

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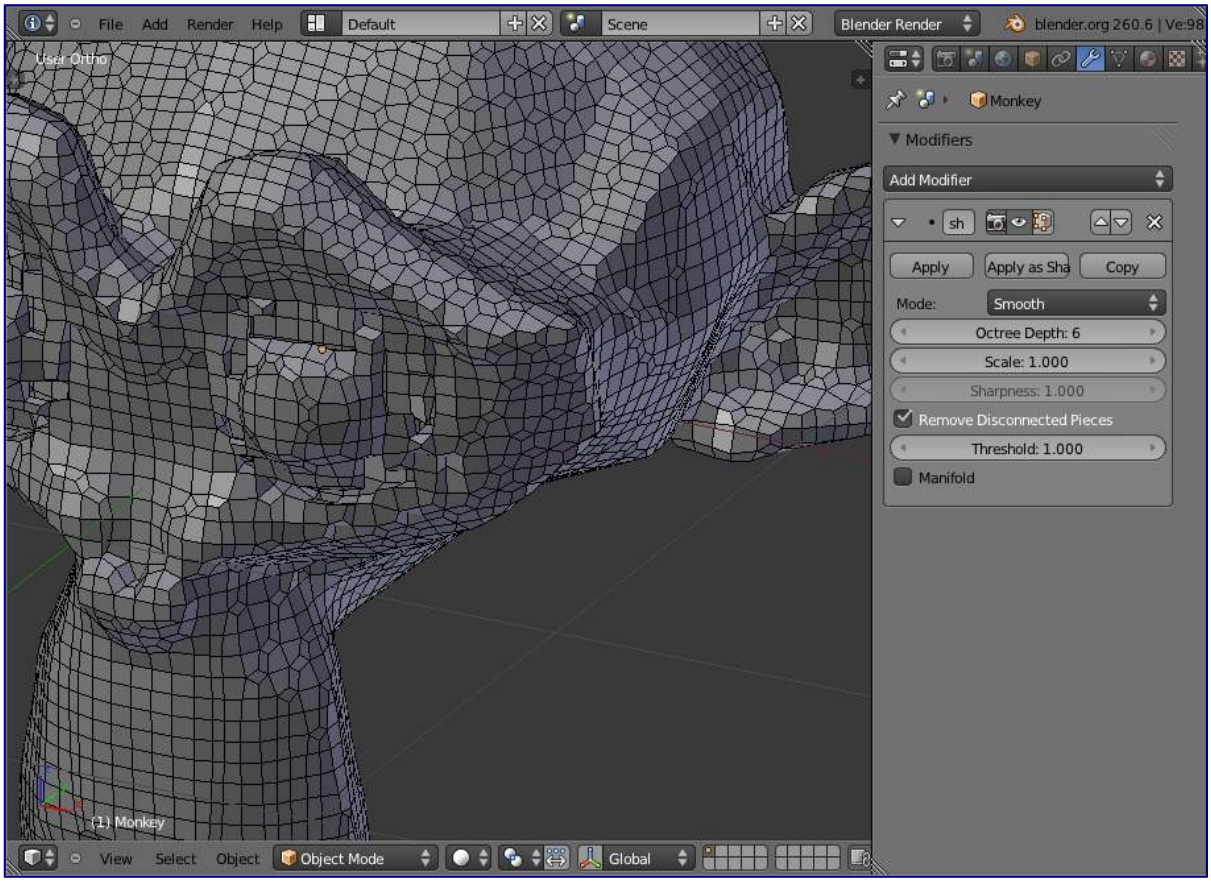
Remesh Modifier

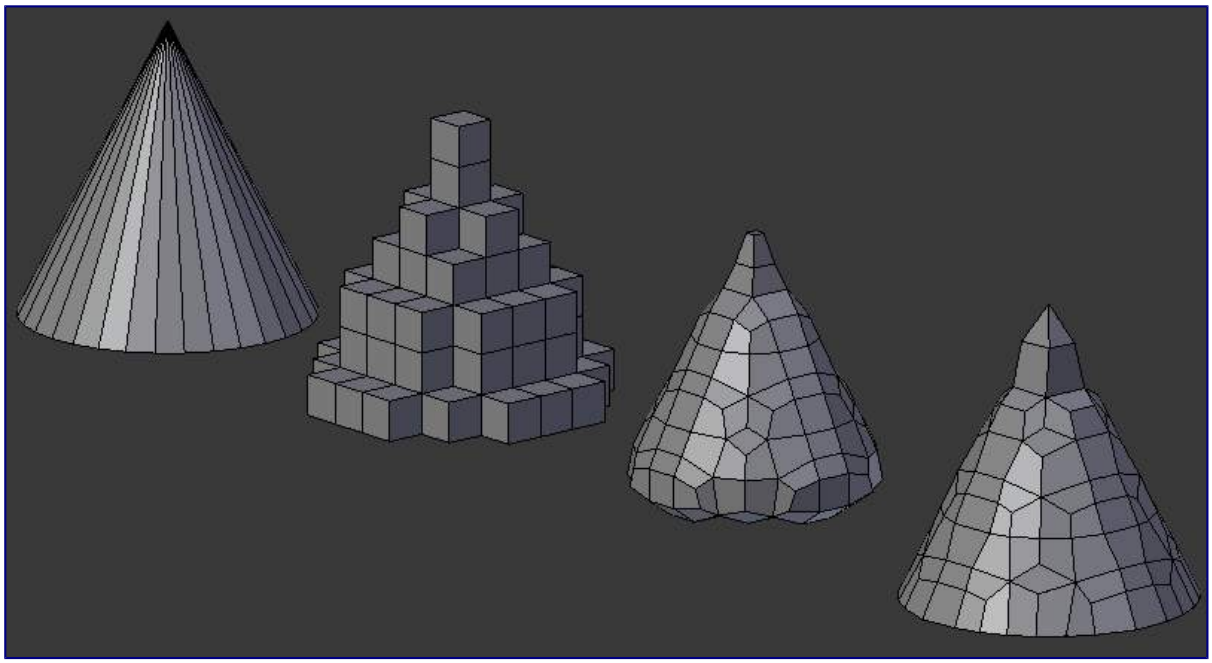
The Remesh modifier is a tool for generating new mesh topology. The output follows the surface curvature of the input, but its topology contains only quads.



Options

Mode

There are three basic modes available in the remesh modifier: Blocks, Smooth and Sharp.



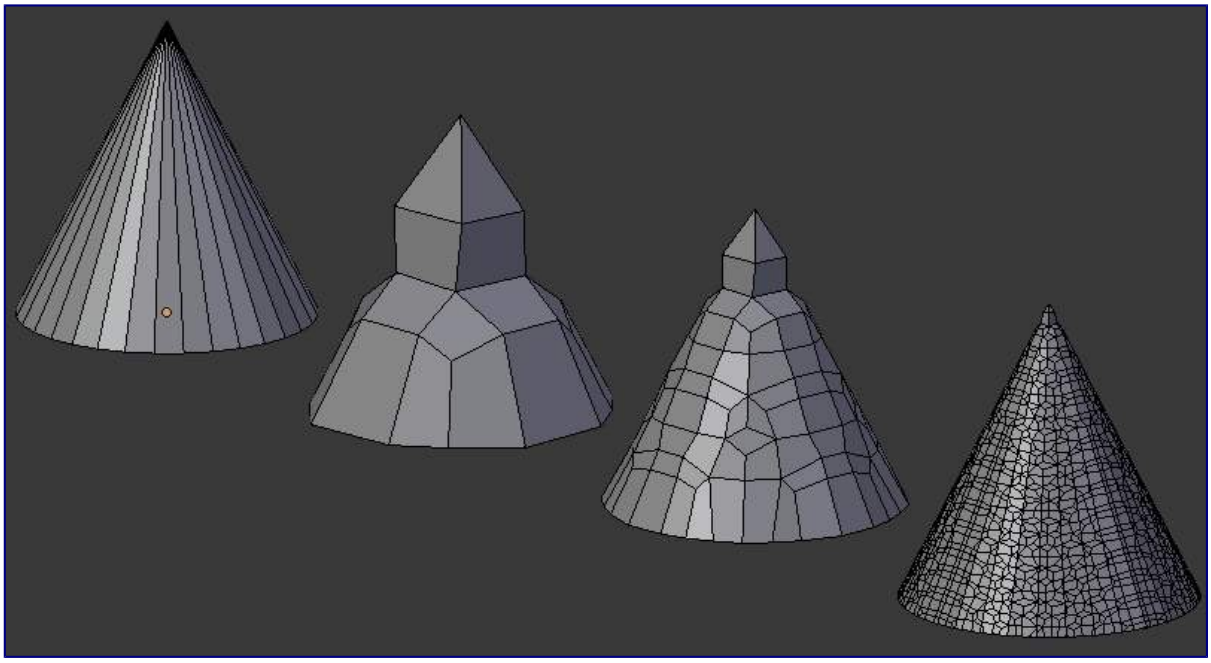
This example shows a cone with each of the different remesh modes. From left to right: original cone, Blocks, Smooth, and Sharp

The output topology is almost identical between the three modes; what changes is the smoothing.

Blocks
: There is no smoothing at all.

Smooth
: Output a smooth surface.

Sharp
: Similar to *Smooth*, but preserves sharp edges and corners. In the above image, the circular bottom of the cone and the top point of the cone are more accurately reproduced in Sharp mode.



Input mesh, and the low to high resolution output meshes

Octree Depth

The Octree Depth sets the resolution of the output. Low values will generate larger faces relative to the input, higher values will generate a denser output.

Scale

The result can be tweaked further by setting the Scale; lower values effectively decrease the output resolution.

Sharpness

Shown when using the *Sharp Mode* - Higher values produce edges more similar to the input, while lower values filter out noise.

Smooth Shading

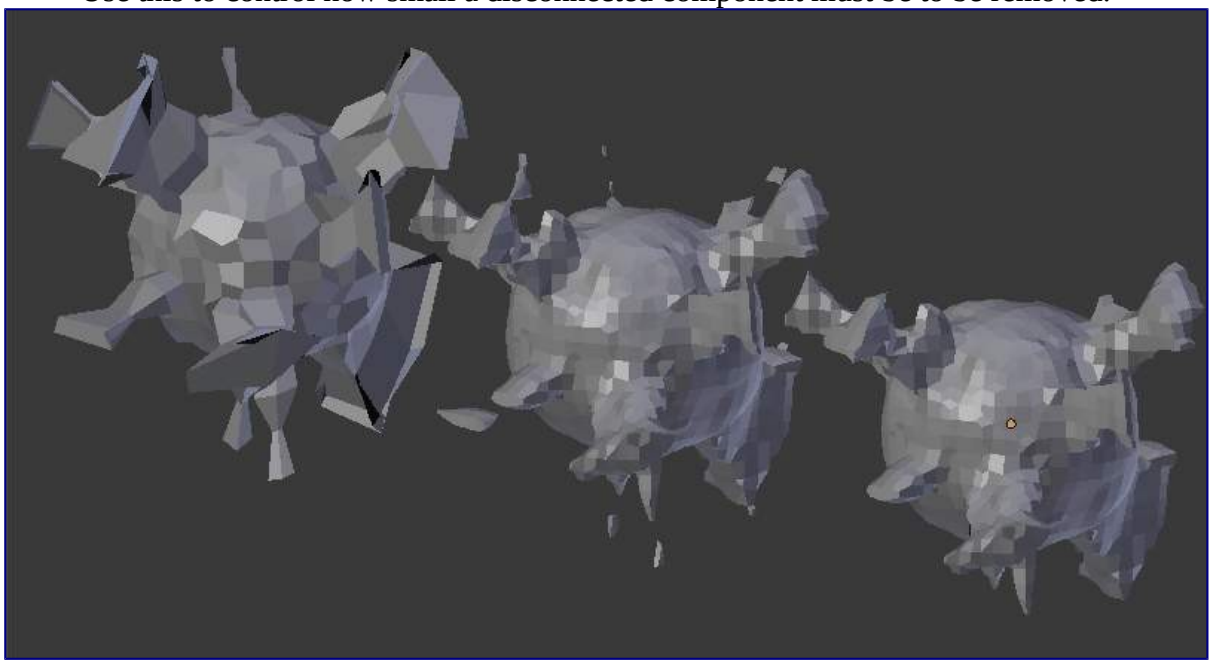
Output faces with smooth shading rather than flat shading. The smooth/flat shading of the input faces is not preserved.

Remove Disconnected Pieces

Filter out small disconnected pieces of the output.

Threshold

Use this to control how small a disconnected component must be to be removed.

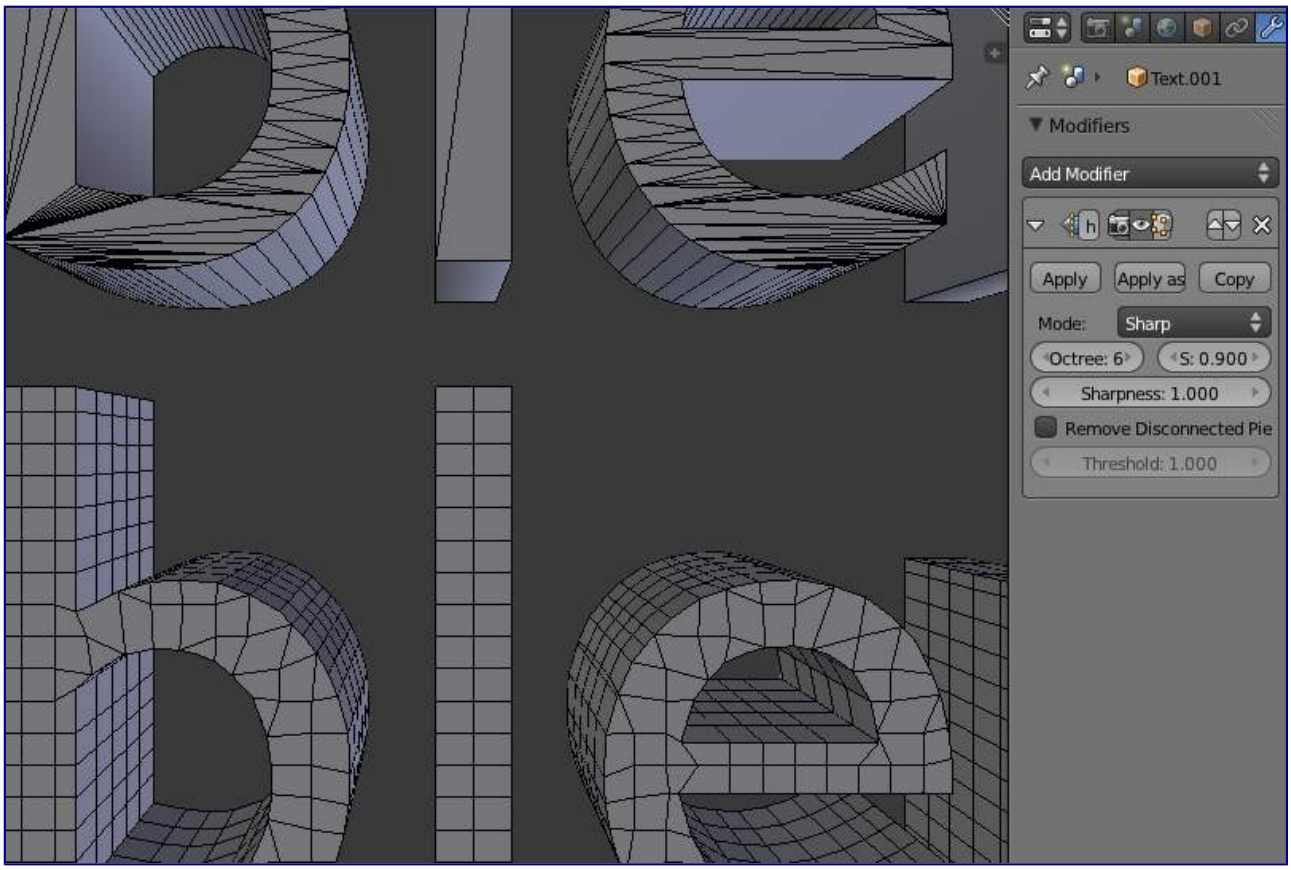


The input mesh (left) is fairly noisy, so the initial output of the remesh modifier (center) contains small disconnected pieces. Enabling Remove Disconnected Pieces (right) deletes those faces.

Usage

In the modifier panel, add a Remesh modifier. The input mesh should have some thickness to it; if the input is completely flat, add a *solidify* modifier above the remesh modifier.

Examples



Remesh modifier applied to text to improve topology

https://youtu.be/Mh-gUnS2c0Y

https://youtu.be/Mh-gUnS2c0Y

https://youtu.be/dker8gRuww4