

## 7.0.2 Editors - 3D View - Mesh Object - Edit Mode - Vertex Context Menu

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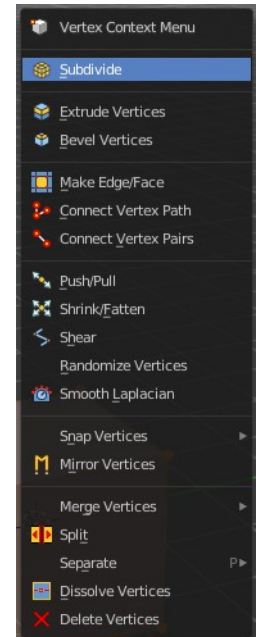
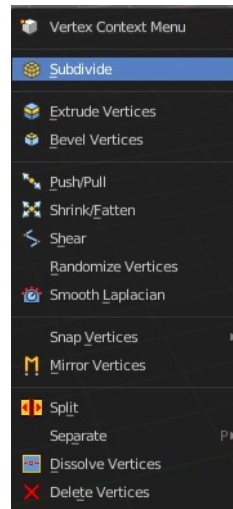
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# Vertex Context Menu

Call this menu with double right click in the 3D viewport. You need to be in Edit mode with a Mesh object. And in selection mode Vertice.

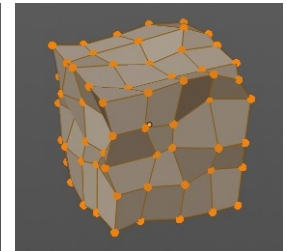
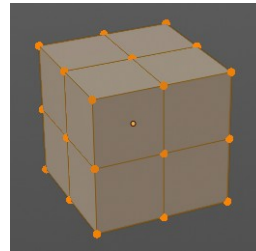
Select geometry to reveal all content.



## Subdivide

Subdivide divides the selected edges. It subdivides the involved faces too, and can create new vertices.

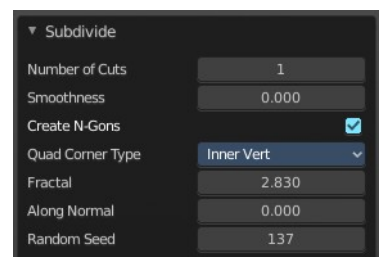
A more unknown functionality is that it can also randomize the result with the Fractal slider in the Last operator panel.



## Last Operator Subdivide

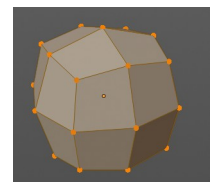
### Number of Cuts

The number of cuts defines the amount of subdivisions.



### Smoothness

This value defines how smooth the subdivision result is. From flat to bent.

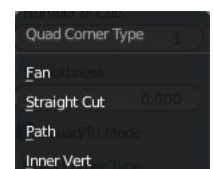


### Create N-Gons

Create N-Gons if required. Else subdividing N-Gons creates Tris.

### Quad Corner Type

Adjust the corner type.



## ***Fractal***

Randomize the selected vertices.

## ***Along Normal***

When randomized, this value defines how strong the subdivision follows the normals of the initial vertices.

## ***Random Seed***

Randomizing value for fractal randomizing.

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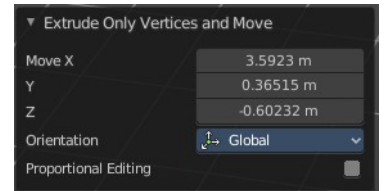
## **Extrude Vertices**

Extrudes out the selected vertices by moving the mouse.

## **Last Operator Extrude Only *Vertices* and Move**

### ***Move X Y Z***

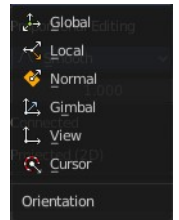
The coordinates for the extruded geometry.



### ***Orientation***

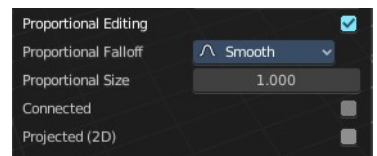
Choose the type of orientation, in which coordinate system the action should happen.

### ***Constraint Axis***



### ***Proportional editing***

Enables proportional editing. Activating proportional editing reveals further settings.



### ***Proportional Falloff***

Adjust the falloff methods.

### ***Proportional Size***

See and adjust the falloff radius.

### ***Connected***

The proportional falloff gets calculated for connected parts only.

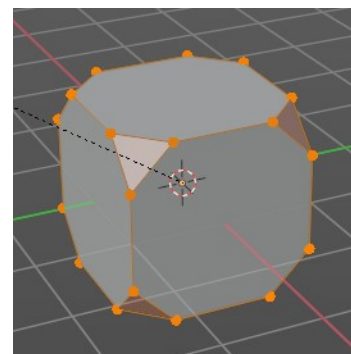
### ***Projected(2D)***

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

---

## Bevel Vertices

Adds a bevel at the selected vertices.



## Last Operator Bevel

### Offset

The Bevel amount. This text changes, dependent of the chosen width type.

### Width type

Which measure type to choose for the bevel action. Offset, Width, Depth or Percent.

### Vertex only

Bevel Vertices only.

### Clamp Overlap

Do not allow beveled geometry to overlap each other.

### Loop Slide

Prefer slide along edge to even widths.

### Mark Seams

Mark the edges of the new created geometry as seams.

### Mark Sharp

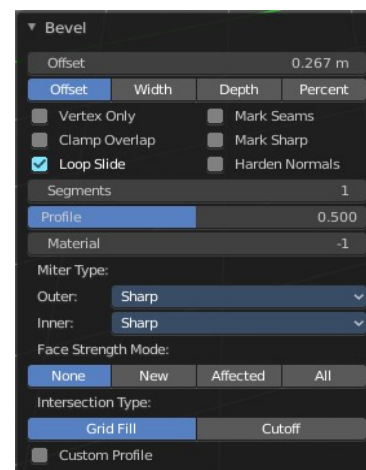
Mark the edges of the new created geometry sharp.

### Harden Normals

When enabled, the per-vertex face normals of the bevel faces are adjusted to match the surrounding faces, and the normals of the surrounding faces are not affected. This will keep the surrounding faces flat (if they were before), with the bevel faces shading smoothly into them. For this effect to work, custom split normals need to be enabled, which requires Auto Smooth to be enabled (see Normals). As a convenience, that option will be enabled for you if it is not already when you enable Harden Normals here.

### Segments

How many segments gets created.



## **Profile**

Controls the Profile shape. 0.5 means round.

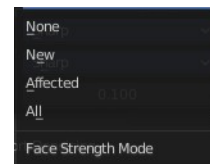
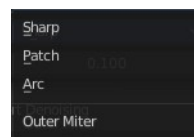
## **Material**

Material for beveled faces. -1 is the surrounding material.

## **Miter Type**

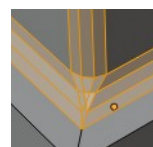
### **Outer Miter**

How the outer miter is set. Miter is how the bevel rounding at a corner is done.



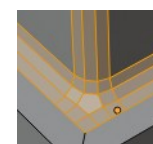
### **Sharp**

Creates a sharp miter.



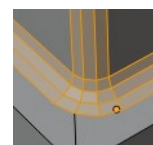
### **Patch**

This replaces the outside vertex of a miter with 3 vertices. And uses a patch pattern there.



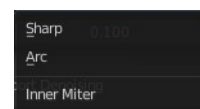
### **Arc**

This replaces the vertex of a miter with 2 vertices, joined by an arc. A separate Spread parameter says how far to move the vertices away from their original position.



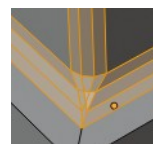
### **Inner Miter**

How the inner miter is set. Miter is how the bevel rounding at a corner is done.



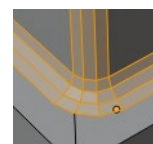
### **Sharp**

Creates a sharp miter.



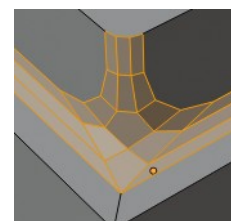
### **Arc**

This replaces the vertex of a miter with 2 vertices, joined by an arc. A separate Spread parameter says how far to move the vertices away from their original position.



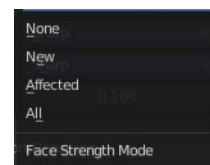
### **Spread**

Belongs to inner miter method Arc. Adjust how strong the inner radius is bent.



## Face Strength Mode

Set Face Strength on the faces involved in the bevel, according to the specified mode. This can be used in conjunction with a Weight Normals Modifier (with the Face Influence option checked).



### None

Do not set face strength.

### New

Set the face strength of new faces along edges to Medium, and the face strength of new faces at vertices to Weak.

### Affected

In addition to those set for the New case, also set the faces adjacent to new faces to have strength Strong.

### All

In addition to those set for the Affected option, also set all the rest of the faces of the model to have strength Strong.

## Intersection type

The method to use to create meshes at intersections. Bevel can create self intersecting geometry.

## Make Edge/Face

Adds a face when you have edges selected. And Edges when you have Vertices selected. It's a Bridge tool.

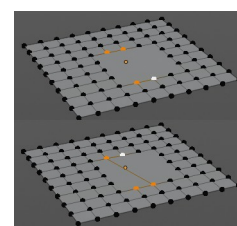
You can have either the one method or the other. When you select two adjacent vertices, then you select the edge too. And the tool works in edge mode then. In this case just the possible faces gets created. Not edges between single vertices.

First select the edges or Vertices that you want to bridge. Then click the New Edge/Face from Vertices Button.



## Connect Vertex Path

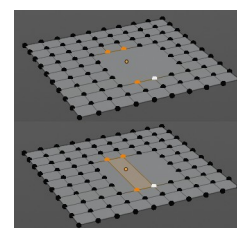
Connect Vertex path connects selected vertices, but takes the vertex order into account in which you selected the vertices. It just creates edges between vertices that are not connected in this order.





## Connect Vertex Pair

Connect Vertex pair connects selected vertices and makes a face of the pairs.



## Push/Pull

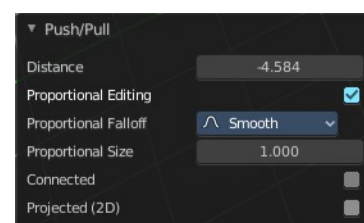
It pushes or pulls the object positions relative to the center of the selection.

In Object mode this tool requires to have more than one object selected.

## Last Operator Push/Pull

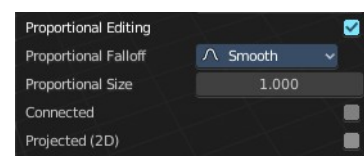
### *Factor*

Adjust the strength of influence of the tool.



### *Proportional editing*

Enables proportional editing. Activating proportional editing reveals further settings.



### **Proportional Falloff**

Adjust the falloff methods.

### **Proportional Size**

See and adjust the falloff radius.

### **Connected**

The proportional falloff gets calculated for connected parts only.

### **Projected(2D)**

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

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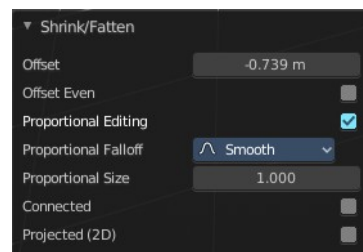
## Shrink/Fatten

Shrink/Fatten scales the selected geometry along its normals. Transform orientation and Pivot point gets ignored.

A positive value pushes the vertices outwards. A negative value pushes the vertices inwards.

## Last Operator Shrink/Fatten

The Last Operator Shrink/Fatten panel gives you tools to adjust the Shrink/Fatten operation. Here you have numeric input for the strength and a few more options.



### Offset

Offset is the strength of the offset for Shrink/Fatten.

### Offset Even

Offset Even scales the selection to give more thickness in even areas.

### Proportional editing

Enables proportional editing. Activating proportional editing reveals further settings.

### Proportional Falloff

Adjust the falloff methods.

### Proportional Size

See and adjust the falloff radius.

### Connected

The proportional falloff gets calculated for connected parts only.

### Projected(2D)

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

## Shear

Shear shears the selection.

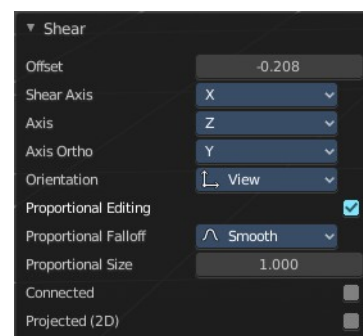
## Last Operator Shear

### Offset

Adjust an offset.

### Shear Axis

The shear tool works along a imaginary 2d plane. The shear axis controls if the items are sheared along the x or the y axes of this plane. This is the plane along which the transformation happens. You can shear along the x or the y axis of this plane.



To make things even more complicated, the orientation of this imaginary plane is defined by the Axis and Axis Ortho items below.

## **Axis**

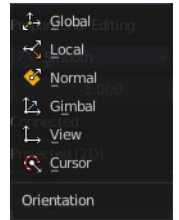
Defines one axis of the imaginary shear axis plane.

## **Axis Ortho**

Defines the other axis of the imaginary shear axis plane.

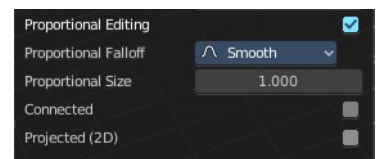
## **Orientation**

Choose the orientation for the shear action.



## **Proportional editing**

Enables proportional editing. Activating proportional editing reveals further settings.



## **Proportional Falloff**

Adjust the falloff methods.

## **Proportional Size**

See and adjust the falloff radius.

## **Connected**

The proportional falloff gets calculated for connected parts only.

## **Projected(2D)**

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

## **Randomize Vertices**

This tool allows randomizes the positions of the selected vertices.

## **Last Operator Randomize**

### **Amount**

Adjust the amount.



### **Uniform**

The uniform offset distance.

### **Normal**

Align the offset direction to the normals.

## ***Random Seed***

The seed value for randomization.

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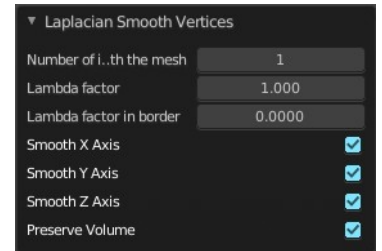
## **Smooth Laplacian**

Laplacian Smooth Vertex smooths out the angles between the selected vertices. It is a tool to reduce noise at the mesh. It works a bit different than the normal Smooth Vertex tool. And gives a different result. The Laplacian method allows you to preserve the volume, and to adjust border smoothing.

### **Last Operator Laplacian Smooth Vertex**

#### ***Number of Iterations***

Number of Iterations is the number of iterations that the smoothing action gets repeated. With 1 the smoothing is just performed once. With 10 it is performed ten times.



#### ***Lambda Factor***

Lambda Factor is the strength of the smoothing.

#### ***Lambda Factor in border***

Lambda Factor is the strength of the smoothing in border areas.

#### ***Smooth Axis***

The Smooth Axis check boxes allows you to limit the smoothing to specific world axis.

#### ***Preserve Volume***

Preserve Volume preserves the volume of the object.

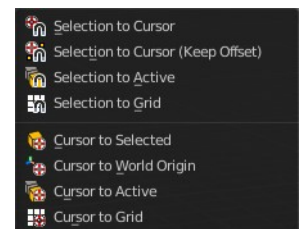
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## **Snap Vertices**

Choose several methods to snap one element to another. The menu items should be self explaining.

### **Last Operator Snap**

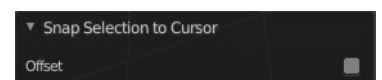
Some snap operations shows a last operation panel, some not.



#### **Offset**

If the selection should snap as a whole, or if each individual element of the selection should snap.

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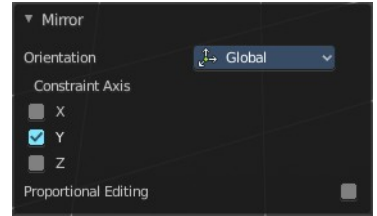


## Mirror Vertices

Mirror by hotkeys. You activate the tool, type in x for x global for example, or x x for x local. And the selection gets mirrored.

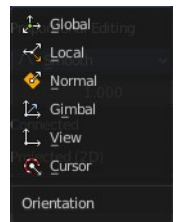
## Last Operator Mirror

The Last Operator Mirror panel gives you tools to adjust the mirror action.



### Orientation

Orientation is a drop-down box choose the type of orientation for the mirroring action.

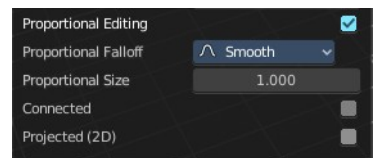


### Constraint Axis

Constraint Axis gives you again the possibility to define the mirror axis. You can choose more than one axis here.

### Proportional editing

Enables proportional editing. Activating proportional editing reveals further settings.



### Proportional Falloff

Adjust the falloff methods.

### Proportional Size

See and adjust the falloff radius.

### Connected

The proportional falloff gets calculated for connected parts only.

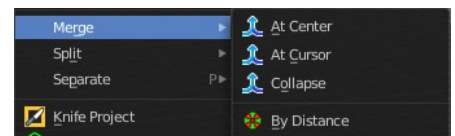
### Projected(2D)

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

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## Merge Vertices

Merges the geometry.



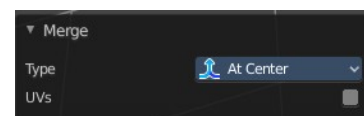
### At Center, At Cursor, Collapse

Merges the geometry with the given methods.

## Last Operator Merge

### Type

Choose the merge method again.



### UV's

Move the UV's according to the merge.

## By Distance

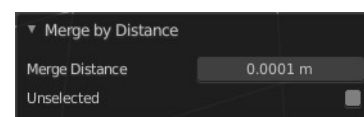
Merge the vertices by their distance to each other. This tool is meant to remove double vertices at the same location.

## Last Operator Merge by Distance

### Merge Distance

Adjust the distance below which the vertices gets merged.

Merge selected vertices to unselected vertices.



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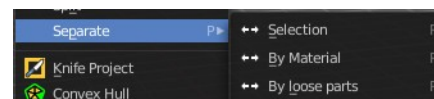
## Split

Splits the edges between the selected vertices. It creates two edges out of one. And splits the edge by that.

---

## Separate

Separate separates the selected geometry, and creates a new object. The geometry becomes uneditable, since it is now a new object. You will have to leave the Edit mode, select the new object, and re-enter Edit mode when you want to edit it.



### Selection

Selection separates the current selection.

### By Material

By Material separates all geometry that has the same material than the current selection.

### By Loose Parts

By Loose parts separates all geometry that is connected by edges to the current selection.

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## Dissolve Vertices

Dissolve Vertices dissolves the selected Vertices.

Note that pressing DEL in Vertice select mode calls Dissolve Vertices already. It's the same operator. But you don't get the Last operator that way.

## Last Operator Dissolve Vertices

### *Face Split*

Split off Face corners to maintain surrounding geometry

### *Tear Boundary*

Split off Face corners instead of merging faces.



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## Delete Vertices

Deletes the selected vertices.