



## 7.1.21 Editors - 3D View - Header - Curve - Edit mode - Curve menu

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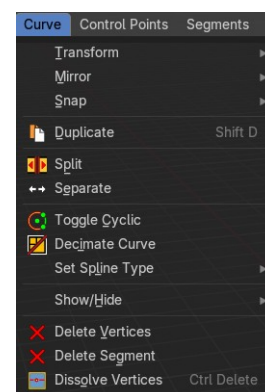
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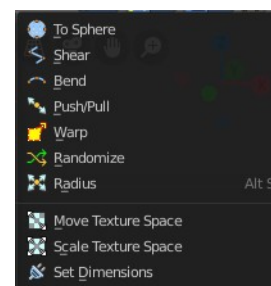
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## Edit Mode - Curve Menu

The curve menu just exists for curve objects.



## Transform



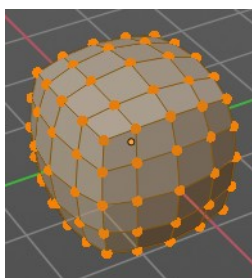
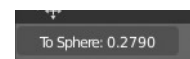
### To Sphere

Shapes a selection of objects into the shape of a sphere. The calculation happens with the object origins.

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

### Usage

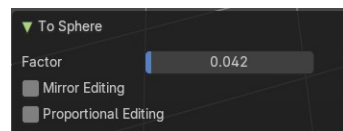
Select the vertices, activate the tool, then drag the mouse in the 3D viewport. In the header you will read the current factor then. Which tells you how close you are towards the sphere shape.



## Last Operator To Sphere

### **Factor**

The factor to transform the selection into a shape form.

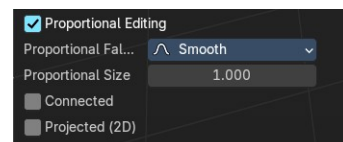


### **Mirror Editing**

Enable mirror editing.

### **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.

## Shear

Shear shears the selection.

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

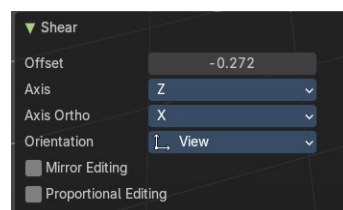
The shear tool works along a imaginary 2d plane. The shear axis controls if the items are sheared along the x or the y axes of this plane. This is the plane along which the transformation happens. You can shear along the x or the y axis of this plane.

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

## Last Operator Shear

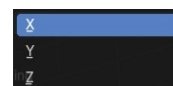
### **Offset**

Adjust an offset.



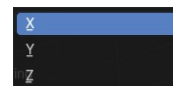
### **Axis**

Defines one axis of the imaginary shear axis plane.



## **Axis Ortho**

Defines the other axis of the imaginary shear axis plane.



## **Orientation**

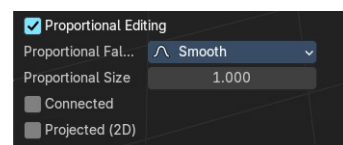
Choose the orientation for the shear action.

## **Mirror Editing**

Enable mirror editing.

## **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.

---

## **Bend**

Bends the selection.

---

## **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.

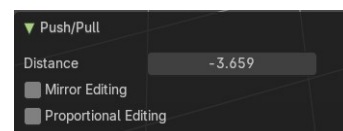
## **Last Operator Push/Pull**

### **Distance**

Adjust the distance of influence of the tool.

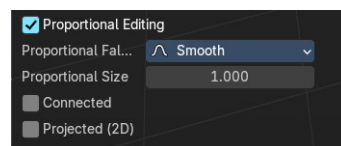
### **Mirror Editing**

Enable mirror editing.



## ***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.

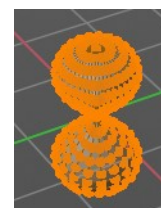
### **Projected(2D)**

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.

---

## **Warp**

Warp a mesh selection between two defined points. This also works with curves.



### **Last operator Warp**

#### ***Warp Angle***

The strength of the warp effect.

#### ***Offset Angle***

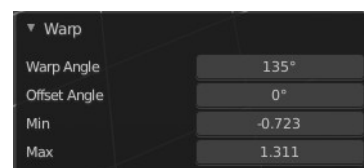
An offset angle to bend side wards.

#### ***Min***

The start point.

#### ***Max***

The end point.



---

## **Randomize Transform**

This tool allows randomizes the positions of the selected vertices.

### **Last Operator Randomize Transform**

#### ***Amount***

Adjust the amount.



## **Uniform**

The uniform offset distance.

## **Normal**

Align the offset direction to the normals.

## **Random Seed**

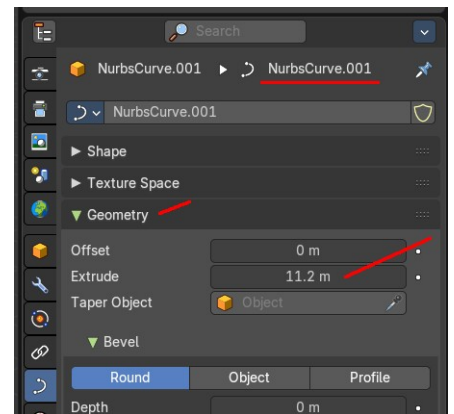
The seed value for randomization.

## **Radius**

Scales the selected geometry of a curve along its normals. Transform orientation and Pivot point gets ignored.

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

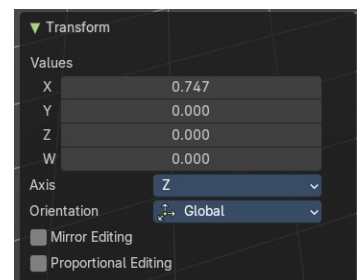
The curve needs to have geometry !



## **Last Operator Transform**

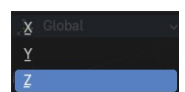
### **Values**

The transform values.



### **Axis**

The transform axis.



### **Orientation**

Choose the orientation.

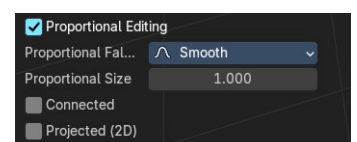


### **Mirror Editing**

Enable Mirror Editing.

### **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

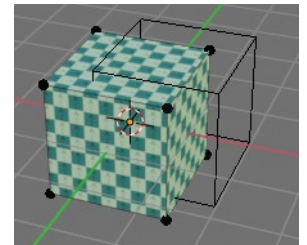
The proportional falloff gets calculated for connected parts only.

## 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.

## Move Texture Space

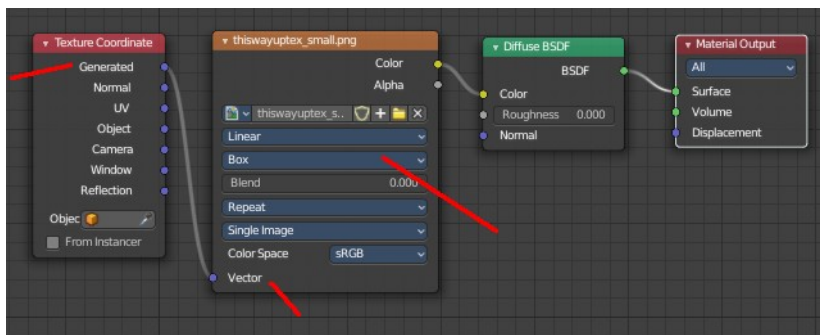
This tool relies at the move tool. With the difference that it moves the texture space instead of the object. It has also a very special use case, and just works with a material with a Texture Coordinate / Generated node. And requires to have the shading at Material or Rendered to see a result in the viewport.



In the viewport you will see the UV cage in black color. In the header you will see the values for the current position of the UV cage.

Dx: -0.1501 m Dy: 0.05851 m Dz: 0.2117 m (0.2661 m)

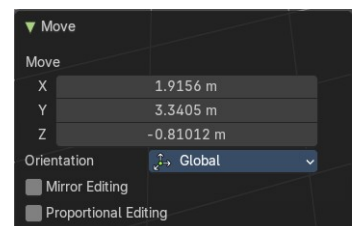
Note that once done and applied, there is no way to reset the UV cage back to zero. When you repeat the operation, then the values will start at 0 again. Even when the UV cage is already offset.



## Last Operator Move

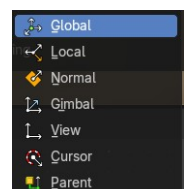
### Move

Adjust in which directions you want to transform.



### Orientation

Choose the orientation.

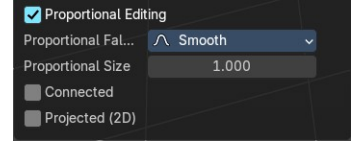


## Mirror Editing

Enable mirror editing.

## 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.

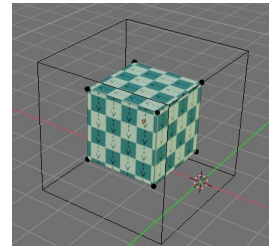
## Projected(2D)

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.

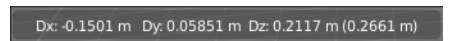
## Scale Texture Space

Scale Texture space is similar to the Move texture Space. With the only difference that it scales the UV space instead of moving it.

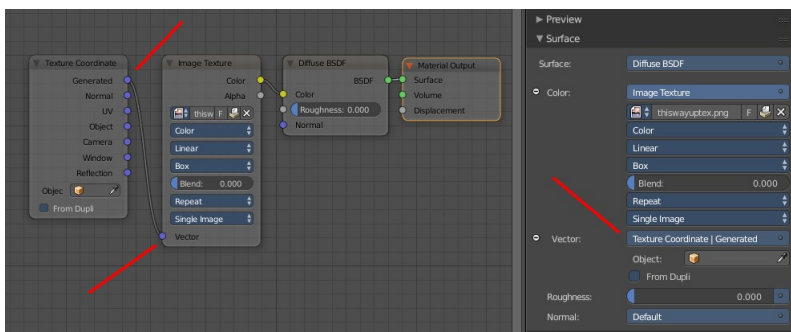
This tool relies at the scale tool. With the difference that it scales the texture space instead of the object. It has also a very special use case, and just works with a material with a Texture Coordinate / Generated node. And requires to have the shading at Material or Rendered to see a result in the viewport.



In the viewport you will see the UV cage in black color. In the header you will see the values for the current position of the UV cage.



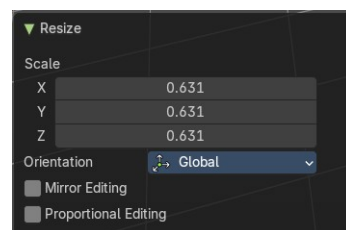
Note that once done and applied, there is no way to reset the UV cage back to zero. When you repeat the operation, then the values will start at 0 again. Even when the UV cage is already offset.



## Last Operator Resize

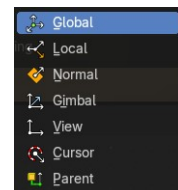
### Scale

Adjust in which directions you want to transform.



### Orientation

Choose the orientation.

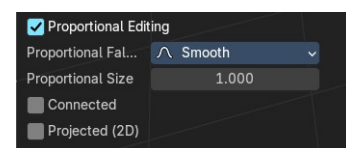


### Mirror Editing

Enable mirror editing.

### 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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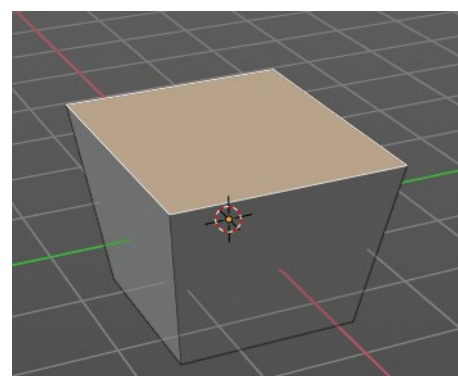
## Set Dimensions

Edit Mode Only!

Normally all scale operations in Bforartists are relative to the current selection and dimensions. And you always start with a relative value of 1.

Set dimensions allows to scale mesh selections in absolute world values. No matter how the initial values are. The new values gets set in the Last Operator.

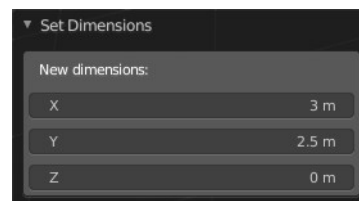
Set dimensions is an add-on. You can turn it off in the add-ons section of the user preferences when you want.



## Last Operator Set Dimensions

### New Dimensions

When you activate the tool then you will see the world coordinates of the selection. Change the values to other world coordinates.



## Mirror submenu

Mirror mirrors the selected geometry along the defined axis.

### Interactive Mirror

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

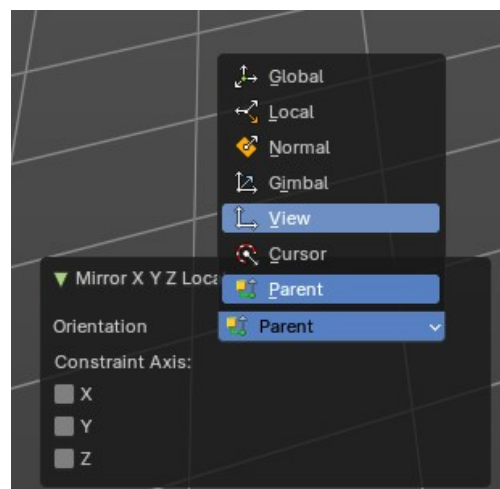


### X Global, Y Global etc.

Mirrors the selection around the chosen axis.

### Last Operator Mirror

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

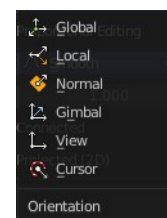


### Orientation

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.



## Snap submenu

## Snap

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

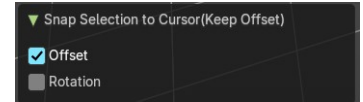


### Last operator Snap Selection to Cursor

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.



#### Rotation

If the selection should be rotated to match the cursor.

## Operators

## Duplicate

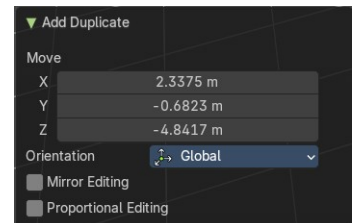
Duplicates the current selection. This can be a single control point or a whole curve.

The copy sticks to the mouse until you release it. A Right click while moving will reset the position of the duplicate. The duplicated part will be part of the same object.

When you drag the duplicate around you will see the position values in the header.

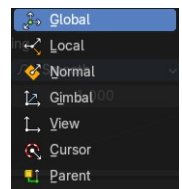
### Last Operator Duplicate

#### Move X, Y, Z



#### Orientation

Choose the orientation.

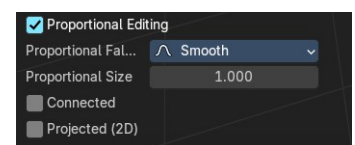


#### Mirror Editing

Enable Mirror Editing.

#### 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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## Split

Splits the curve at the selected control point(s). You need to select two control points to select the segment between it.

---

## Separate

Separates the selected control points, and creates a new curve object out of it. You need to select two control points to select the segment between it.

---

## Toggle Cyclic

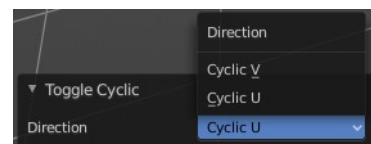
Toggle Cyclic closes or opens the curve.

## Last Operator Toggle Cyclic

### *Direction*

Direction is a drop-down box . Choose the direction in which the curve gets closed.

---



## Decimate Curve

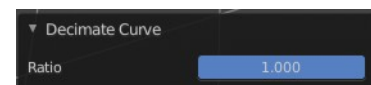
Decimates the currently selected geometry. It starts with a Ratio of 1. Which means no decimation. The lower the ratio the more decimation you will get.

## Last Operator Decimate Curve

### *Ratio*

Adjust the strength of decimation.

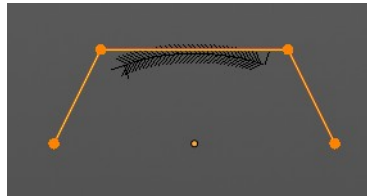
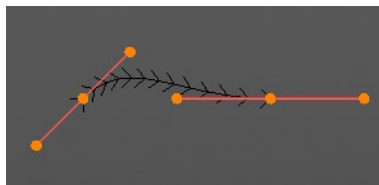
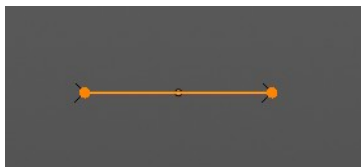
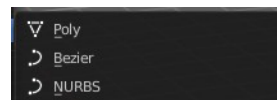
---



## Set Spline Type

With set Spline Type you can set the type of the curve.

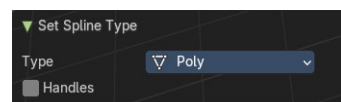
Poly is a straight line between the control points. Bezier has curve handlers. A nurbs curve has a control cage.



## Last Operator Set Spline Type

### Type

Type is a drop-down box . Choose the spline type



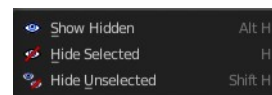
### Handles

Use Handles when converting Bezier curves into polygons.

## Show / Hide

### Show Hidden

Makes all curve geometry in the scene visible again.



### Hide Selected

Hides the selected curve geometry.

### Last Operator Hide Selected

### Unselected

Hides the not selected curve geometry.



### Hide Unselected

Hides the not selected curve geometry. The selected geometry stays visible.

## Delete Vertices

Dissolves the selected vertices. When removing vertices in between then the curve stays intact and connected.

## Delete Segment

Removes the segment between the selected vertices.

## **Dissolve Vertices**

Dissolves the selected vertices. When removing vertices in between then the curve stays intact and connected.