

7.1.27 Editors - 3D View - Header - Metaball - Edit mode - Metaball menu

Detailed Table of content.....	1
Edit Mode - Metaball Menu.....	4
Transform.....	4
To Sphere.....	4
Shear.....	5
Bend.....	6
Push/Pull.....	6
Warp.....	7
Randomize Transform.....	7
Shrink/Fatten.....	7
Move Texture Space.....	8
Scale Texture Space.....	9
Set Dimensions.....	11
Mirror.....	11
Interactive Mirror.....	11
X Global, Y Global etc.....	11
Snap.....	12
Last Operator Snap.....	12
Operators.....	12
Duplicate.....	12
Show / Hide.....	13
Delete.....	14

Detailed Table of content

Detailed table of content

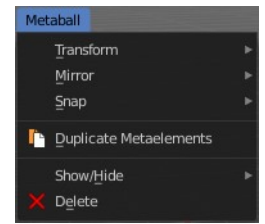
Detailed Table of content.....	1
Edit Mode - Metaball Menu.....	4
Transform.....	4
To Sphere.....	4
Usage.....	4
Last Operator To Sphere.....	4
Factor.....	4
Proportional editing.....	4
Proportional Falloff.....	4
Proportional Size.....	5
Connected.....	5
Projected(2D).....	5
Shear.....	5
Last Operator Shear.....	5
Offset.....	5
Shear Axis.....	5
Axis.....	5
Axis Ortho.....	5
Orientation.....	5
Proportional editing.....	5

Proportional Falloff.....	6
Proportional Size.....	6
Connected.....	6
Projected(2D).....	6
Bend.....	6
Push/Pull.....	6
Last Operator Push/Pull.....	6
Factor.....	6
Proportional editing.....	6
Proportional Falloff.....	6
Proportional Size.....	6
Connected.....	6
Projected(2D).....	6
Warp.....	7
Last operator Warp.....	7
Warp Angle.....	7
Offset Angle.....	7
Min.....	7
Max.....	7
Randomize Transform.....	7
Last Operator Randomize Transform.....	7
Amount.....	7
Uniform.....	7
Normal.....	7
Random Seed.....	7
Shrink/Fatten.....	7
Last Operator Shrink/Fatten.....	8
Offset.....	8
Offset Even.....	8
Proportional editing.....	8
Proportional Falloff.....	8
Proportional Size.....	8
Connected.....	8
Projected(2D).....	8
Move Texture Space.....	8
Last Operator Translate.....	9
Move X, Y Z.....	9
Orientation.....	9
Proportional editing.....	9
Proportional Falloff.....	9
Proportional Size.....	9
Connected.....	9
Projected(2D).....	9
Scale Texture Space.....	9
Last Operator Resize Texture.....	10
Move X, Y Z.....	10
Orientation.....	10
Proportional editing.....	10
Proportional Falloff.....	10
Proportional Size.....	10
Connected.....	10
Projected(2D).....	10
Set Dimensions.....	11

Last Operator Set Dimensions.....	11
New Dimensions.....	11
Mirror.....	11
Interactive Mirror.....	11
X Global, Y Global etc.....	11
Last Operator Mirror.....	11
Orientation.....	11
Constraint Axis.....	12
Proportional editing.....	12
Proportional Falloff.....	12
Proportional Size.....	12
Connected.....	12
Projected(2D).....	12
Snap.....	12
Last Operator Snap.....	12
Offset.....	12
Operators.....	12
Duplicate.....	12
Last Operator Duplicate.....	13
Move X , Y , Z.....	13
Orientation.....	13
Proportional editing.....	13
Proportional Falloff.....	13
Proportional Size.....	13
Connected.....	13
Projected(2D).....	13
Show / Hide.....	13
Show Hidden.....	13
Hide Selected.....	13
Last Operator Hide Selected.....	14
Unselected.....	14
Hide Unselected.....	14
Delete.....	14

Edit Mode - Metaball Menu

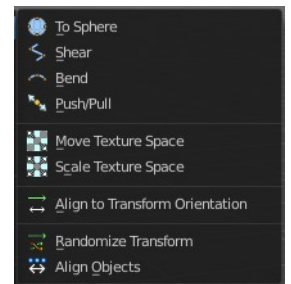
The Metaball menu just exists for Metaball objects.



Transform

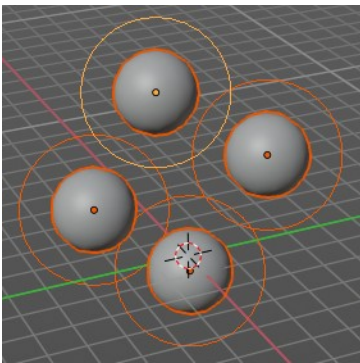
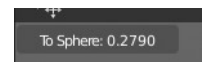
To Sphere

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



Usage

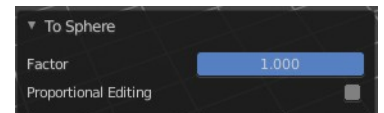
Select the elements, activate the tool, then drag the mouse in the 3D viewport. In the header you will read the current factor then. Which tells you how close you are towards the sphere shape. This also works with meta elements in the same way.



Last Operator To Sphere

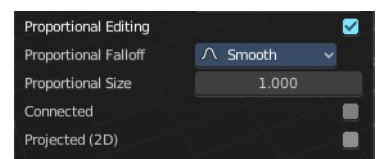
Factor

The factor to transform the selection into a shape form.



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. You need more than one meta element.

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

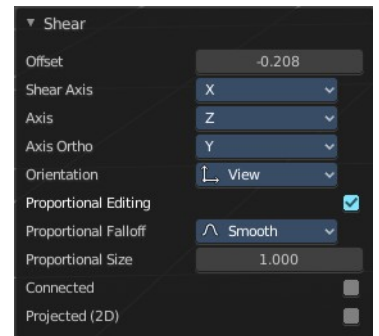
Defines one axis of the imaginary shear axis plane.

Axis Ortho

Defines the other axis of the imaginary shear axis plane.

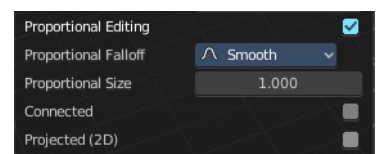
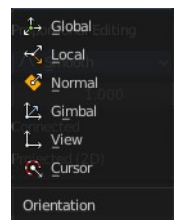
Orientation

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.

Bend

Bends the selection. You need more than one meta element.

Push/Pull

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

You need more than one meta element.

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

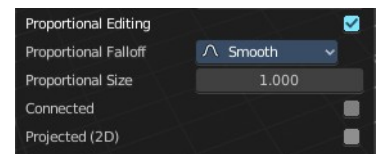
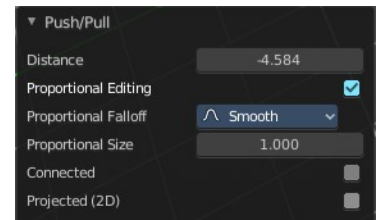
See and adjust the falloff radius.

Connected

The proportional falloff gets calculated for connected parts only.

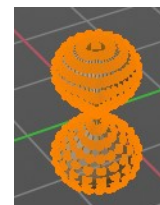
Projected(2D)

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.



Warp

Warp a selection between two defined points. This also works with Metaballs. You need more than one metaball element.



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 meta elements.

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.



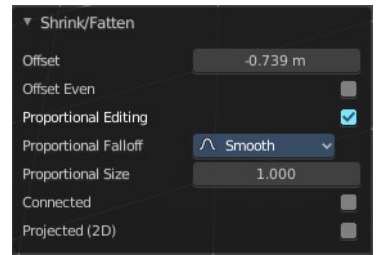
Shrink/Fatten

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.

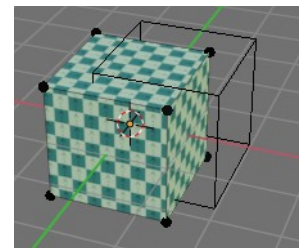
Projected(2D)

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.

Move Texture Space

Move Texture space is meant for mesh objects, but has also functionality with a meta object.

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.

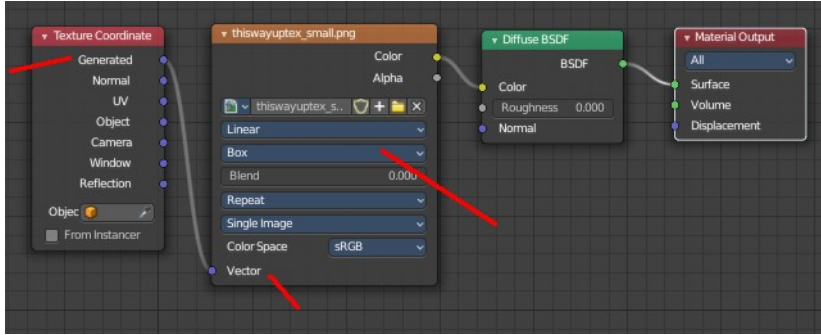


In the viewport you will see the UV cage in black color. In the header you will see the values for the current position of the UV cage.

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

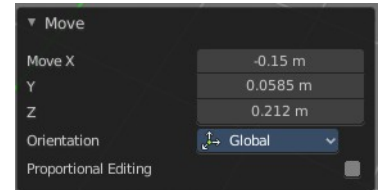
operation, then the values will start at 0 again. Even when the UV cage is already offset.



Last Operator Translate

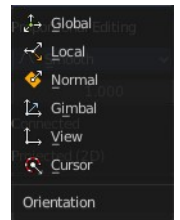
Move X, Y Z

Limit the position relative to the source object.



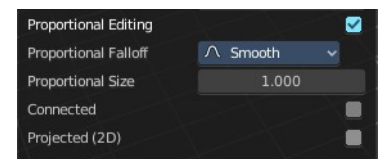
Orientation

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

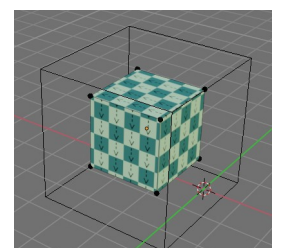
Projected(2D)

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.

Scale Texture Space

Scale Texture space is meant for mesh objects, but has also functionality with a meta object.

This tool relies at the scale tool. With the difference that it scales the texture space

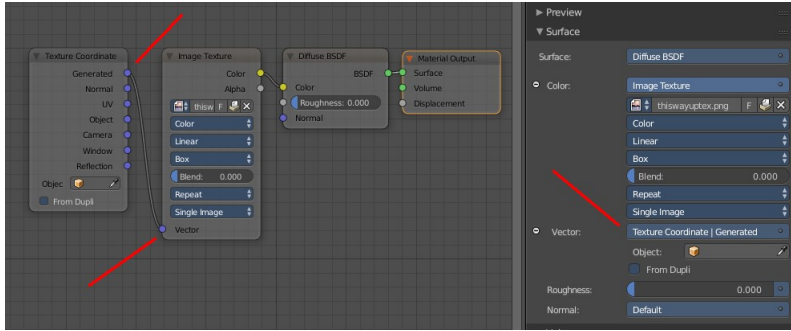


instead of the object. It has also a very special use case, and just works with a material with a Texture Coordinate / Generated node. And requires to have the shading at Material or Rendered to see a result in the viewport.

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.

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

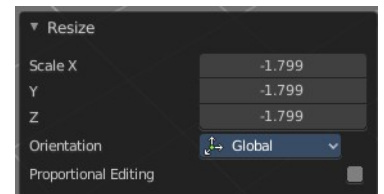
Note that once done and applied, there is no way to reset the UV cage back to zero. When you repeat the operation, then the values will start at 0 again. Even when the UV cage is already offset.



Last Operator Resize Texture

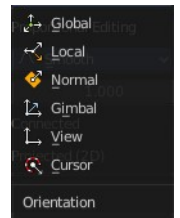
Move X, Y Z

Limit the position relative to the source object.



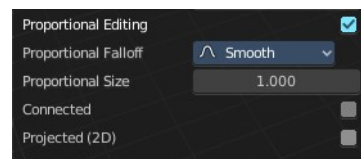
Orientation

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

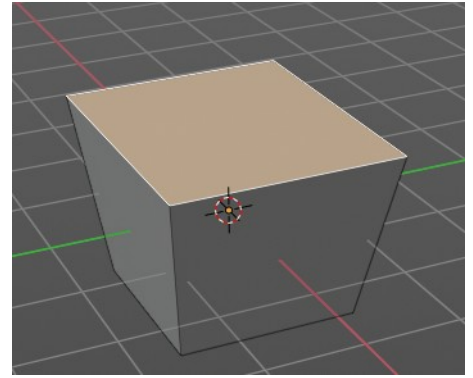
Set Dimensions

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 object selections in absolute world values. No matter how the initial values are. The new values gets set in the Last Operator.

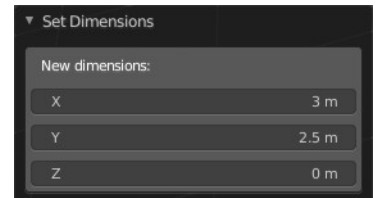
Set dimensions is an add-on. You can turn it off in the add-ons section of the user preferences when you want.



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

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

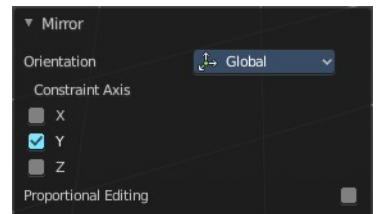


X Global, Y Global etc.

Mirrors the selection around the chosen axis.

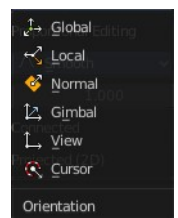
Last Operator Mirror

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.

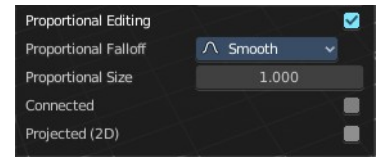


Constraint Axis

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

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

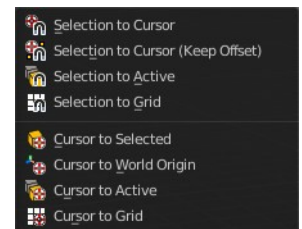
The proportional falloff gets calculated for connected parts only.

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.

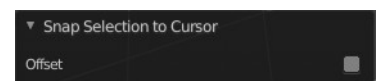
Snap

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.

Operators

Duplicate

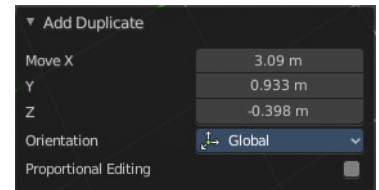
Duplicates the current selection.

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.

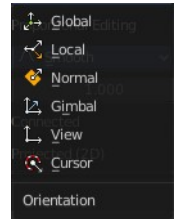
Last Operator Duplicate

Move X , Y , Z



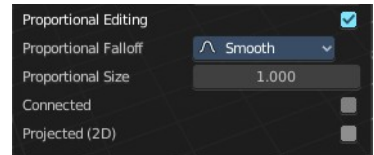
Orientation

Choose the orientation.



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.

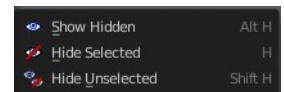
Projected(2D)

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.

Show / Hide

Show Hidden

Makes all geometry in the scene visible again.



Hide Selected

Hides the selected geometry.

Last Operator Hide Selected

Unselected

Hides the not selected geometry.



Hide Unselected

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

Delete

Deletes the current selection.
