In-house Extensions

- Modify Path
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  - Perspective
  - Convert to Dashes
  - Add Nodes
  - Approximate Curves by Straight Lines (Flatten Beziers)
- Generate from Path
  - Voronoi Pattern (Triangulation / Low Poly / Delaunay)
- Export
  - Guillotine (Papierschneidemaschine / Segmentieren)

Modify Path

Modify Path

To Absolute

This extension simply transform paths from relative coordinates to absolute coordinate. The path's "d" attribute will be reconfigured to get uppercase command letters like A C M Z V H L instead of a c m z v h l.

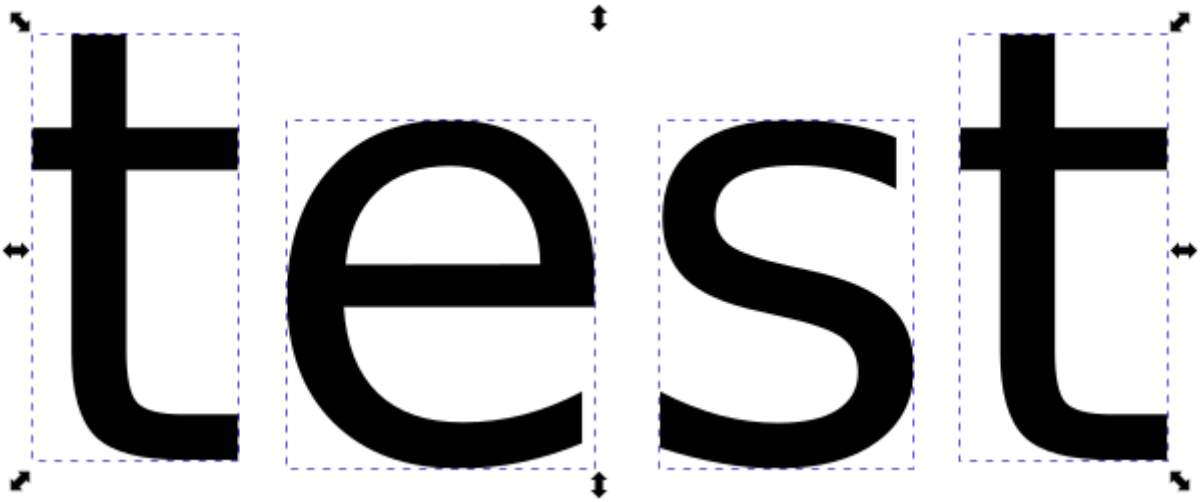
Perspective

Example with text

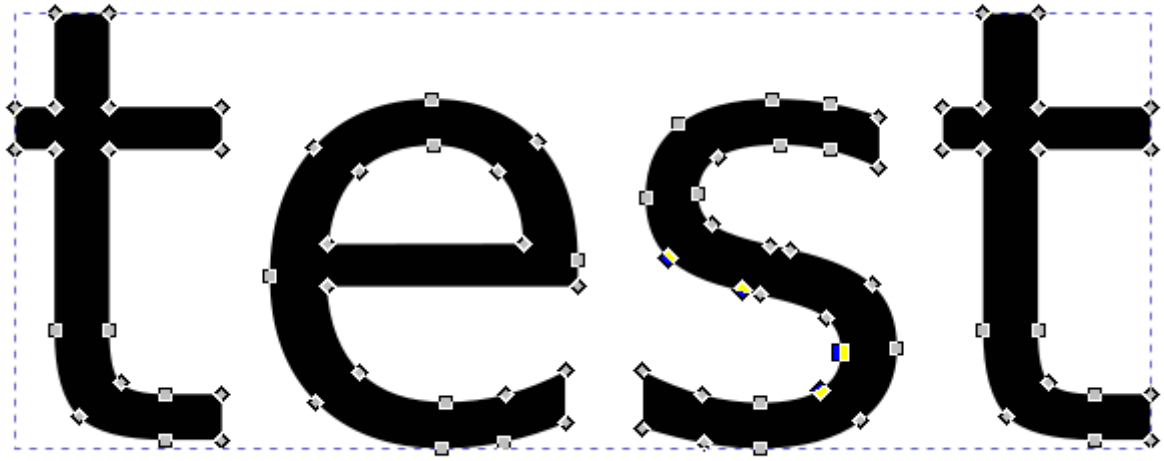
Write some text and convert Object to Path

test

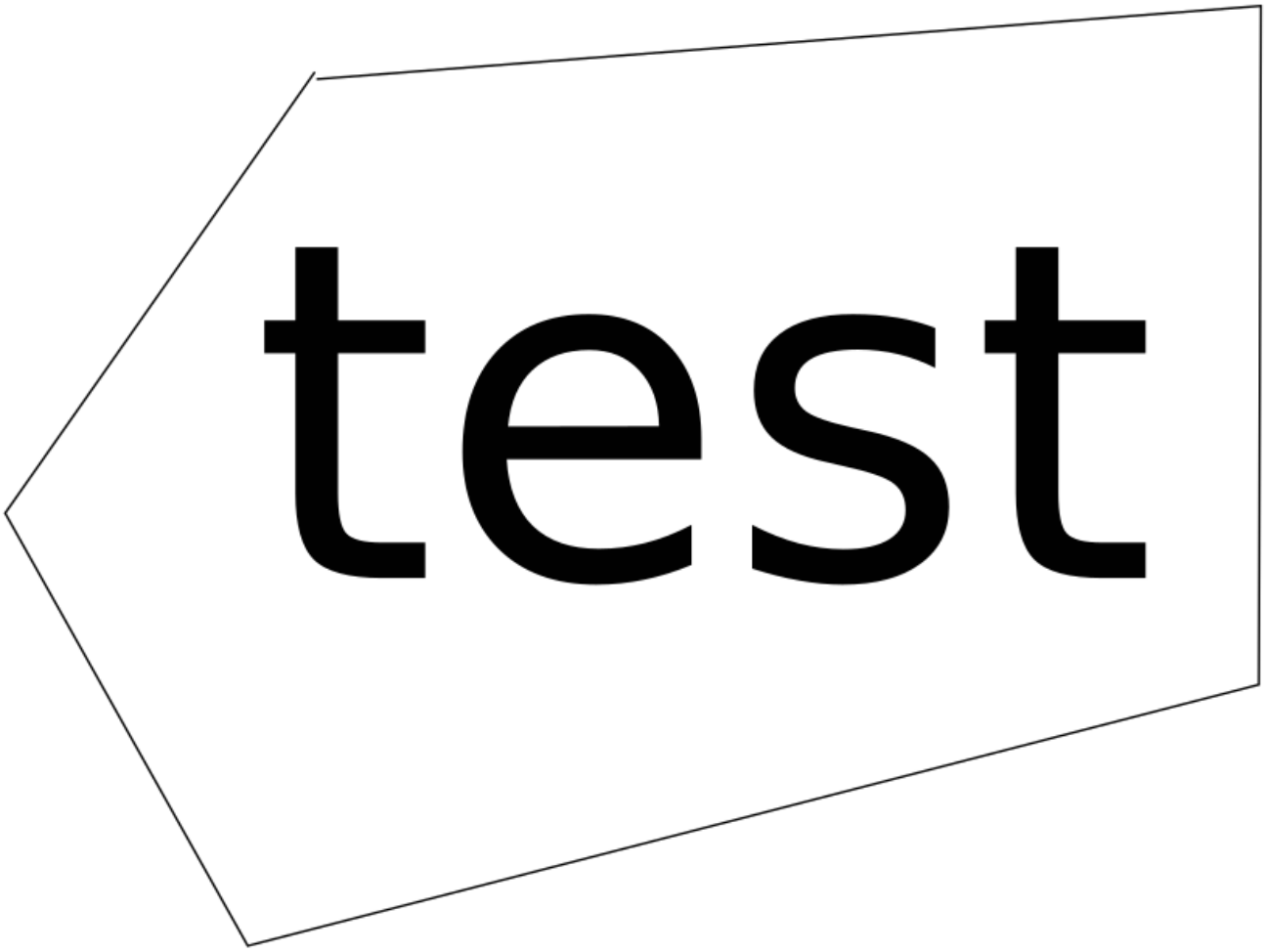
Ungroup



Combine to one Path

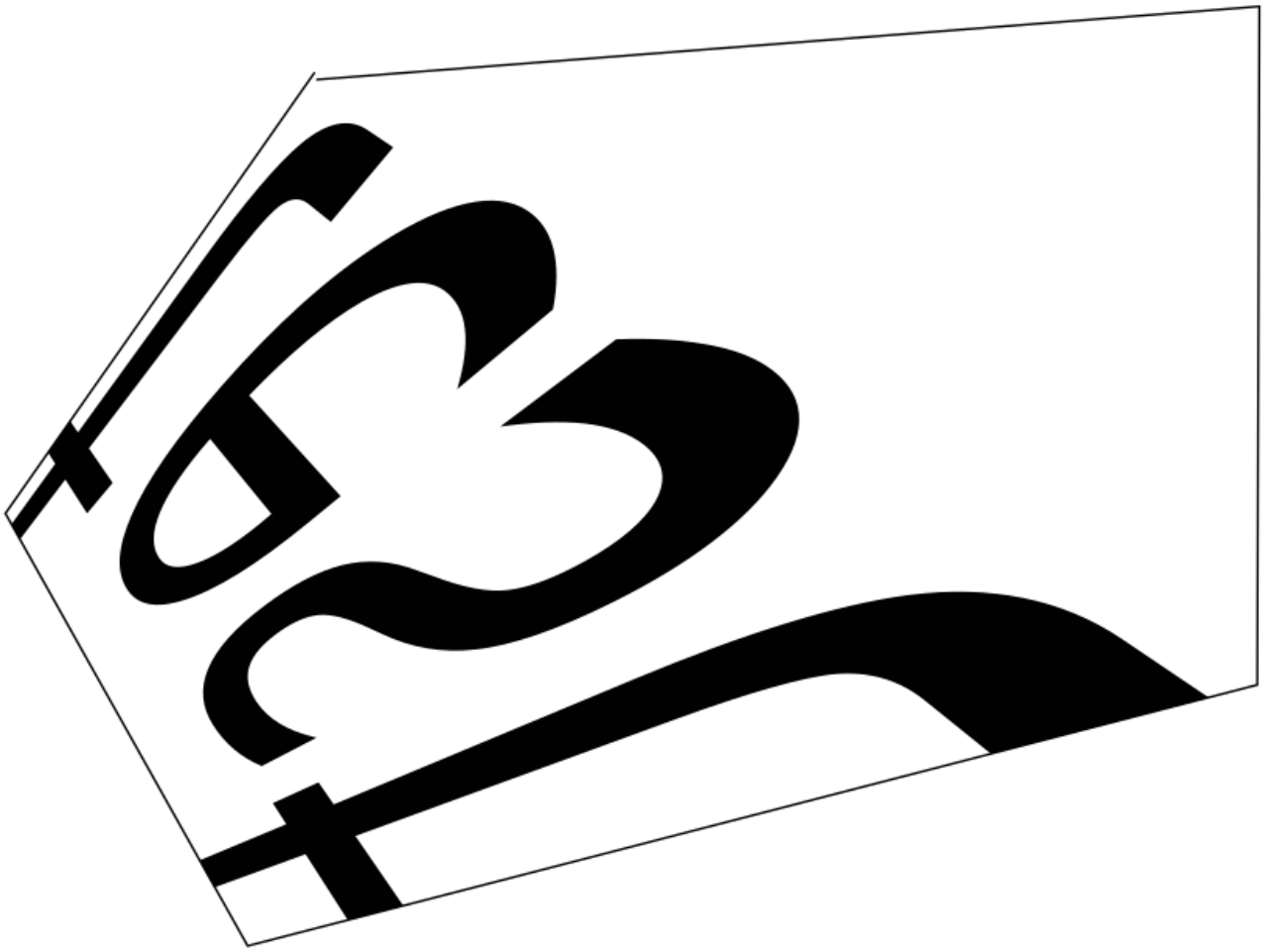


Draw a border path



"Modify Path → Perspective"

Select the text first, then the border. Selection order is important.



This effect can also be done with Live Path Effect or with other extensions - see Transformations

Modify Path

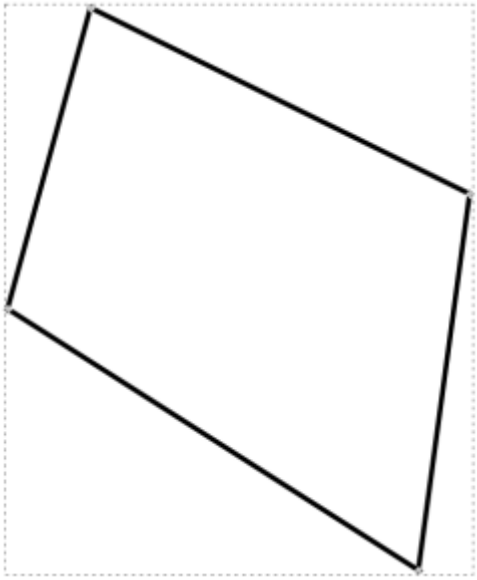
Convert to Dashes

This extension can be used to create bridges / tabs for a laser cutter job. We can define a custom line style (dashed) and convert it using this extension.

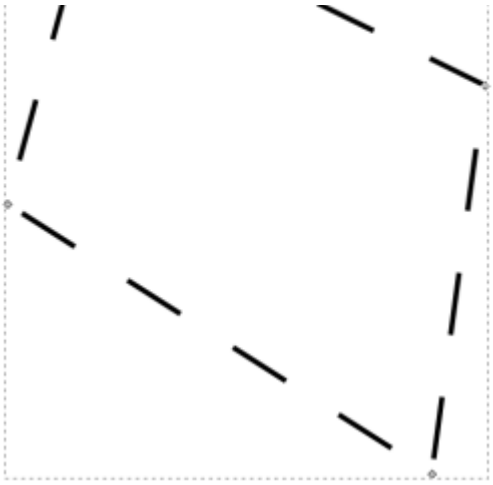
> See also Lasercut bridges without using extensions and Create Links (Breakaway Connectors).

Example 1

Draw some path

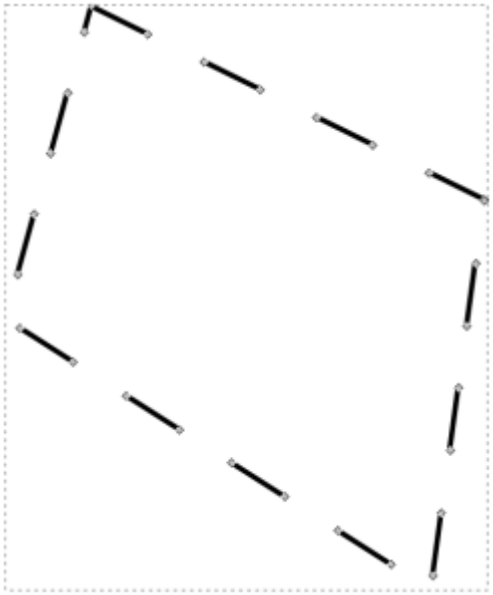


Change stroke style to dashes



Run extension

Each "virtual" dash will be split into a real segmented line

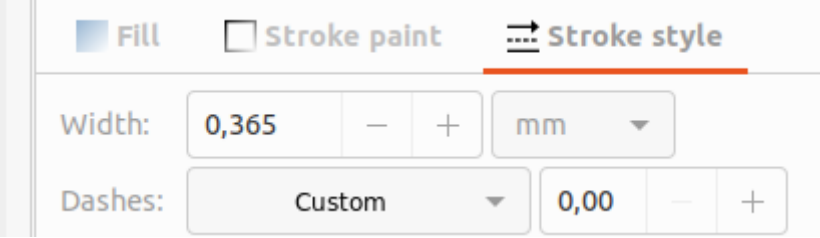


Example 2

Set the document units to mm

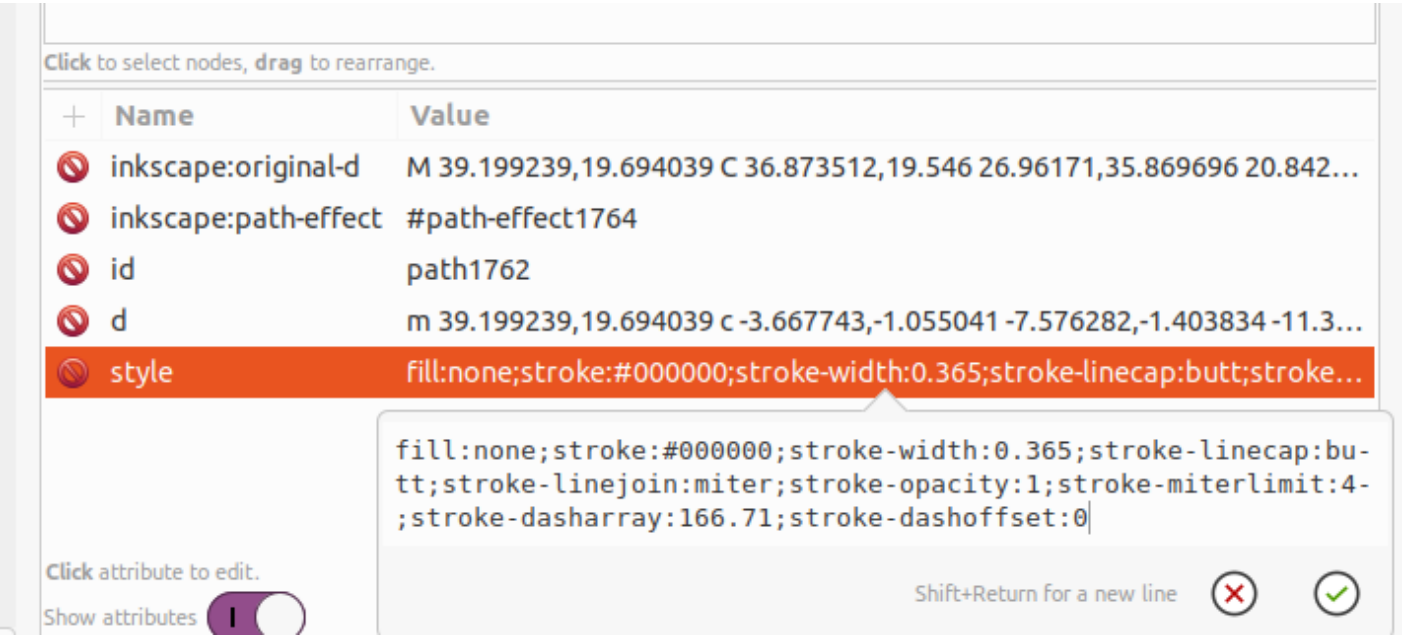
Draw some curve and measure it's length in mm

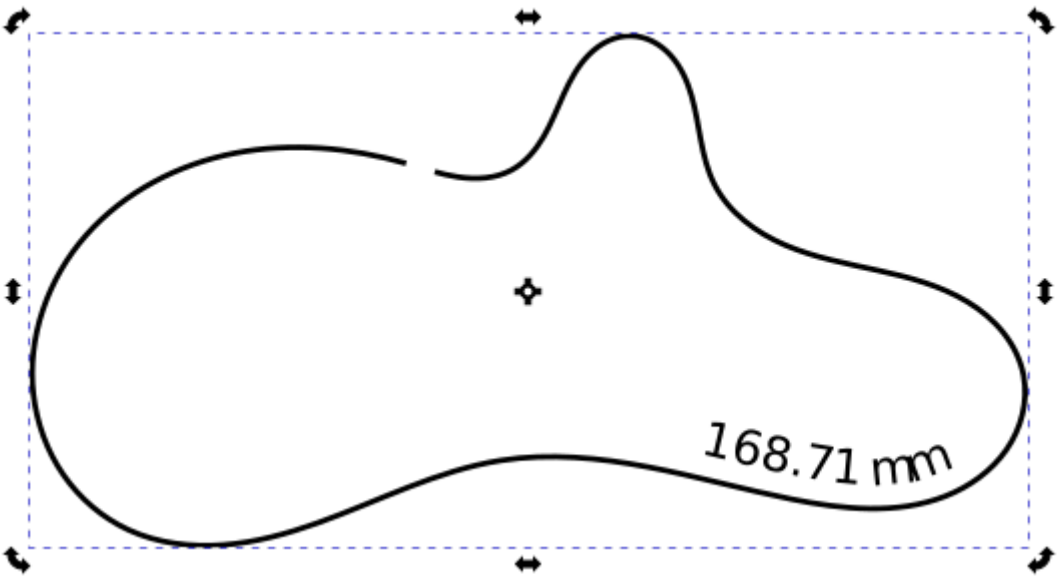
Set custom line style ("Dashes" → "Custom")



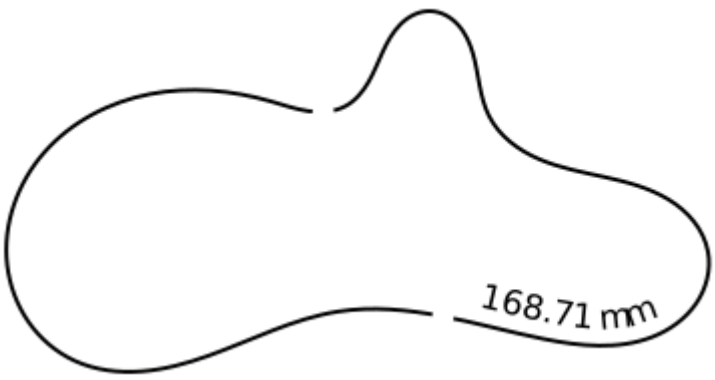
Create a gap

Edit XML style to create a 2 mm gap. In the example line length is 168.71 mm. If we want a single 2 mm gap we set stroke dash array to 168.71mm - 2mm = 166.71mm

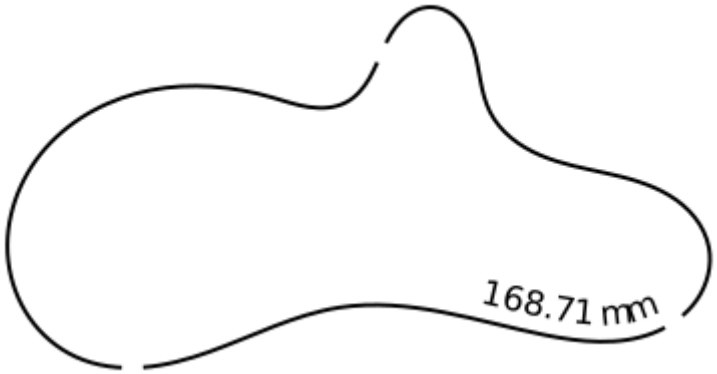




If we want three gaps in a path with length of 168.71 mm and a gap length of 2 mm we set the stroke-dasharray to: 80.355 2.0 → because 3 * 80.355 mm + 2 * 2.0 mm = 168.71 mm



If we want three gaps in a path with length of 168.71 mm and a gap length of 2 mm we set the stroke-dasharray to: 50.236 2.0 → because 3 * 50.236 mm + 3 * 2.0 mm = 168.71 mm

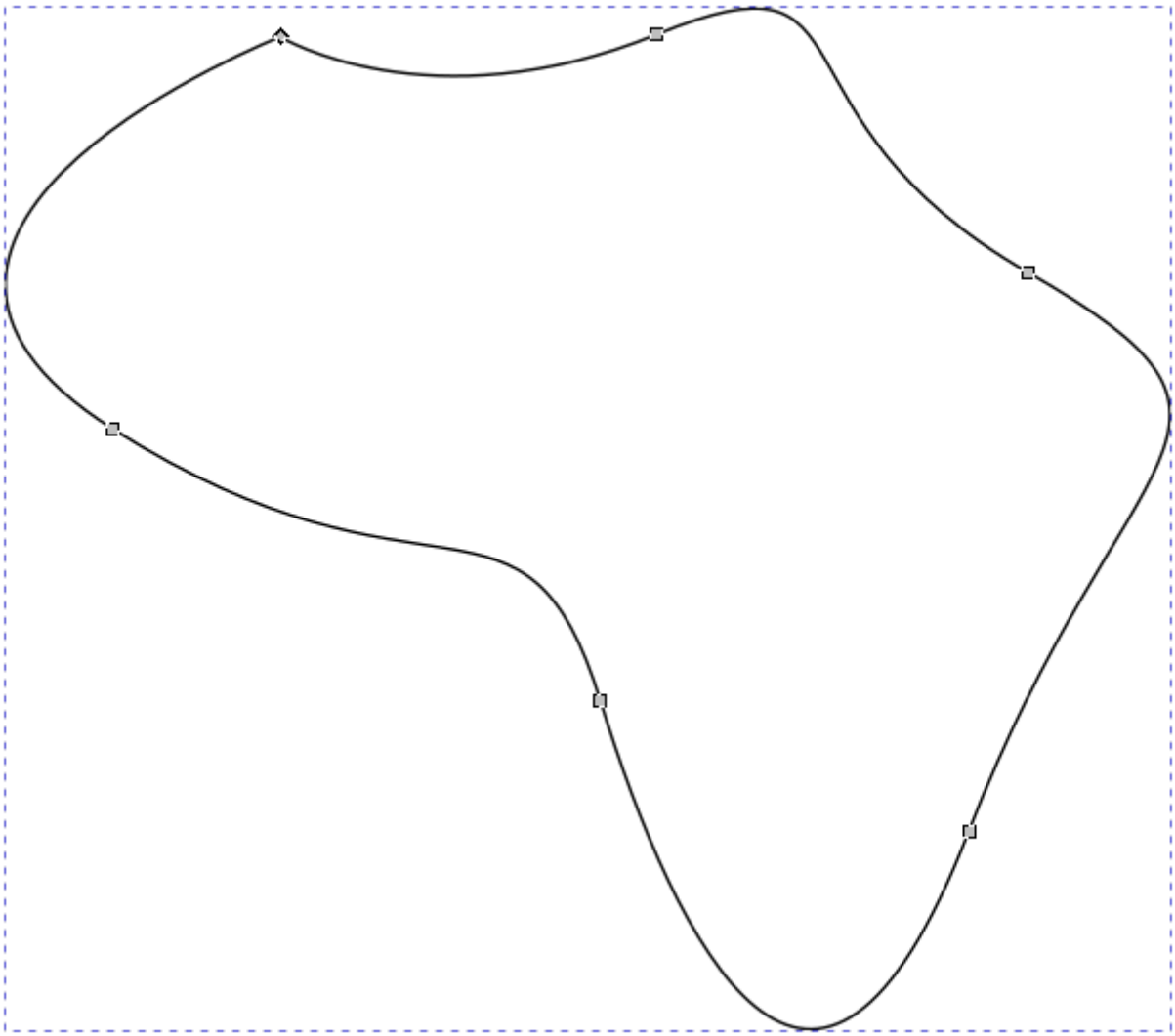


Run the "Convert to Dashes" extension

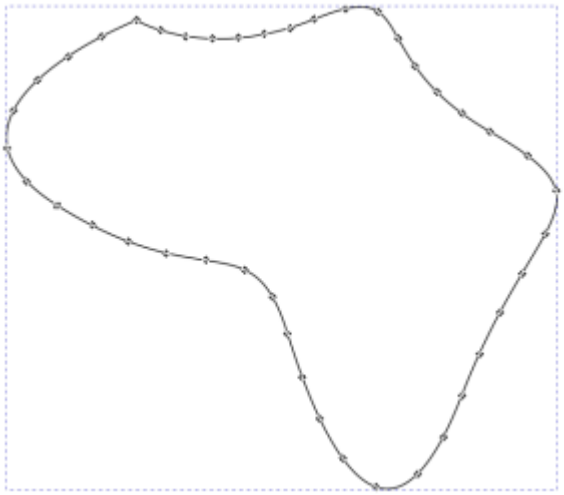
Add Nodes

This behaves similar like Split Bezier (Subdivide Path)

Draw some path



Run "Modify Path" → "Add Nodes"

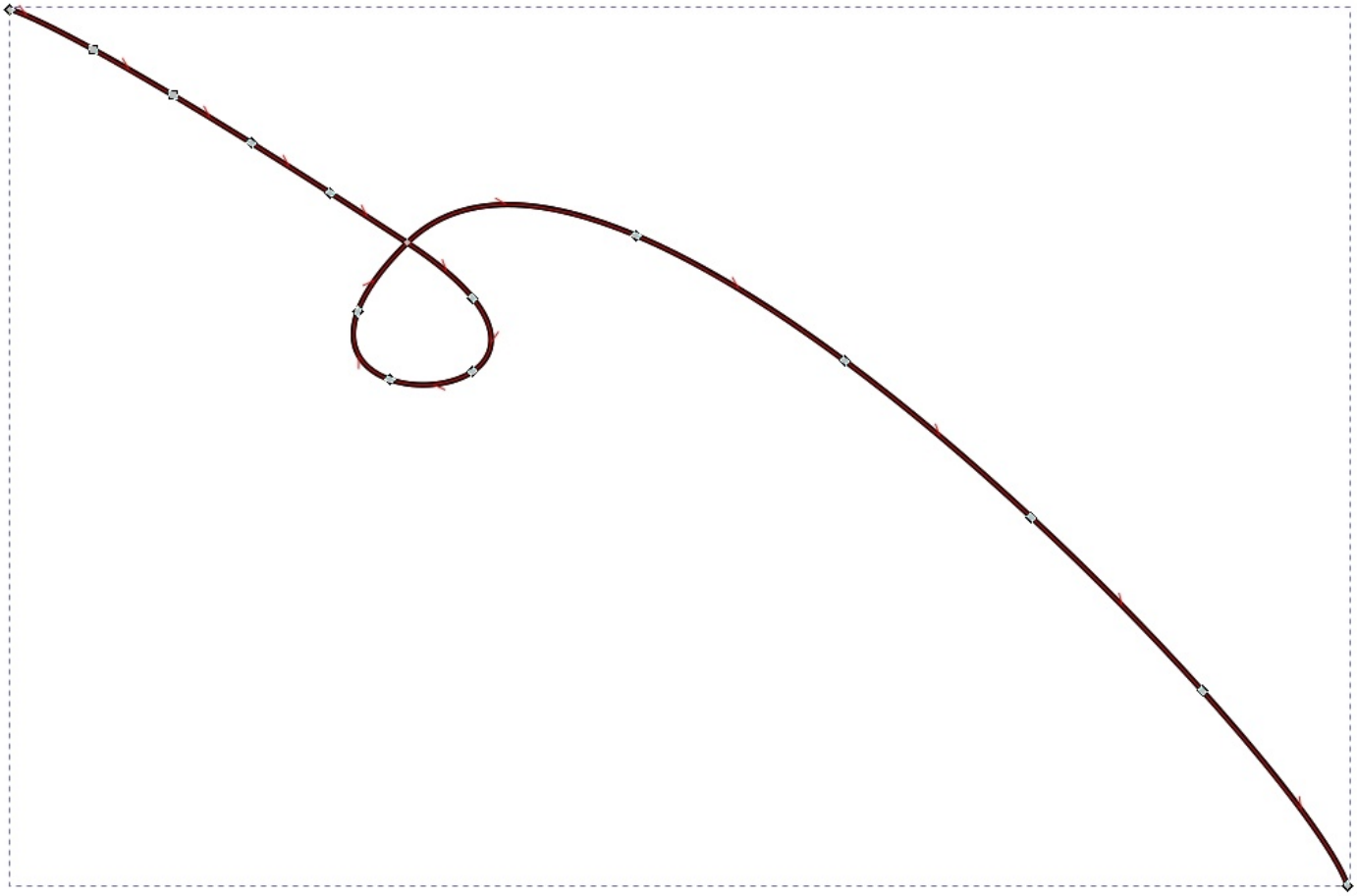


Approximate Curves by Straight Lines (Flatten Beziers)

Hint: The new name of this extension is "Approximate Curves by Straight Lines". The old one was "Flatten Beziers"

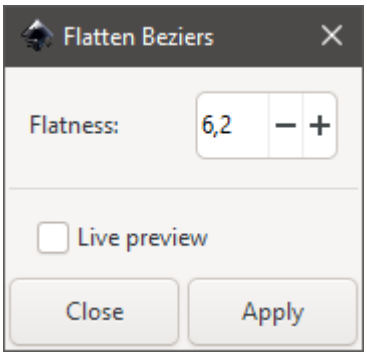
This plugin does not apply for paths in groups. Please ungroup before. You can use Extensions → Arrange → Deep Ungroup) or Ungrouper And Element Migrator/Filter. This extension is similar to Convert To Polylines but has more control over the contours.

Draw some path



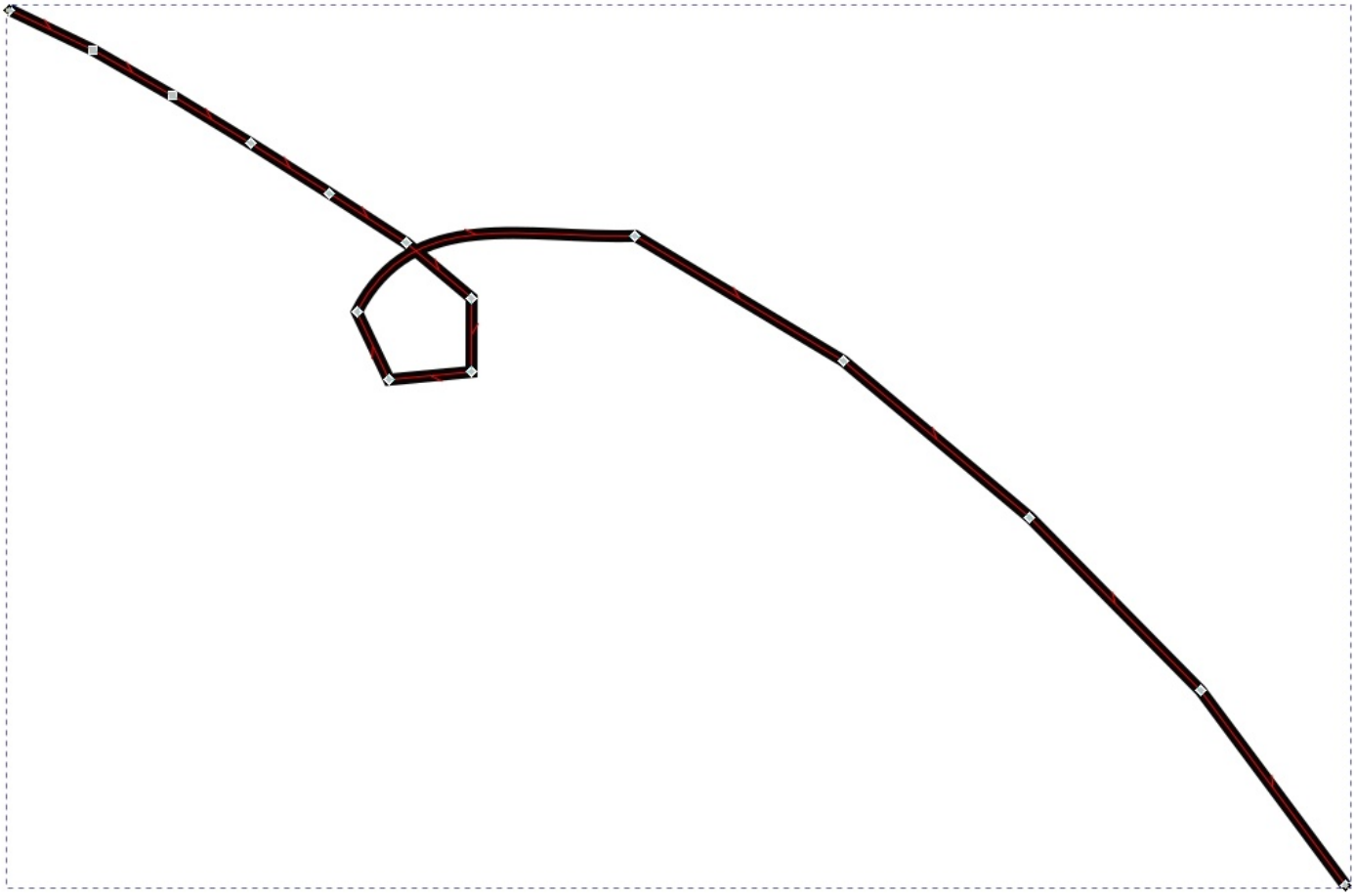
Run the extension

(Info) The higher the flatness value the less grade of detail the new polyline will have.

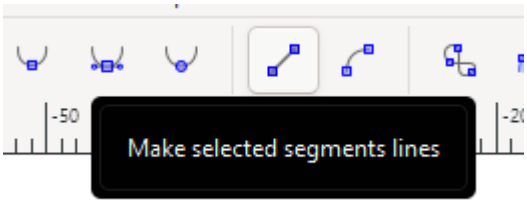


Get the result

Depending on the flatness we can get really smooth or really rough edges! Smooth paths have a lot more handles (points)!



> Similar behaviour to flatten a curve can be forced by switching from to line type to curve type, but with less control for smoothness / segmentation.


-50
Make selected segments lines

Generate from Path

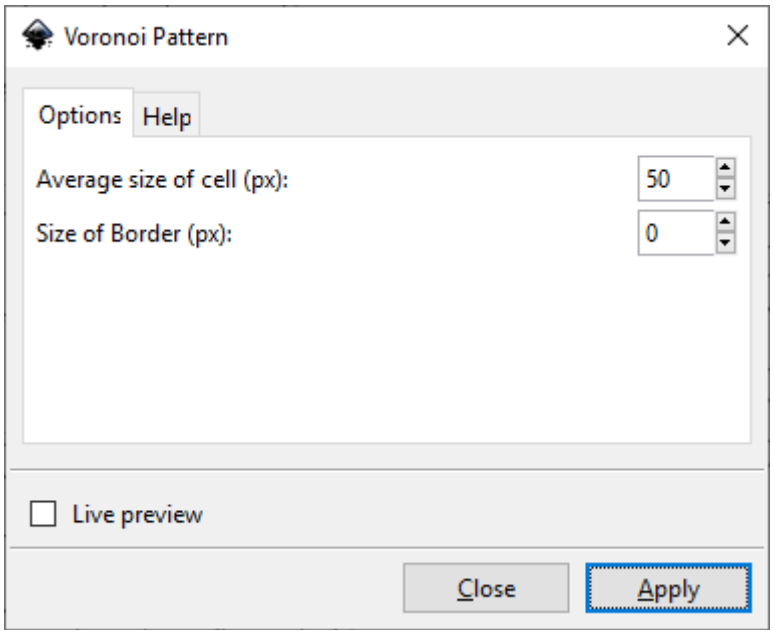
Voronoi Pattern (Triangulation / Low Poly / Delaunay)

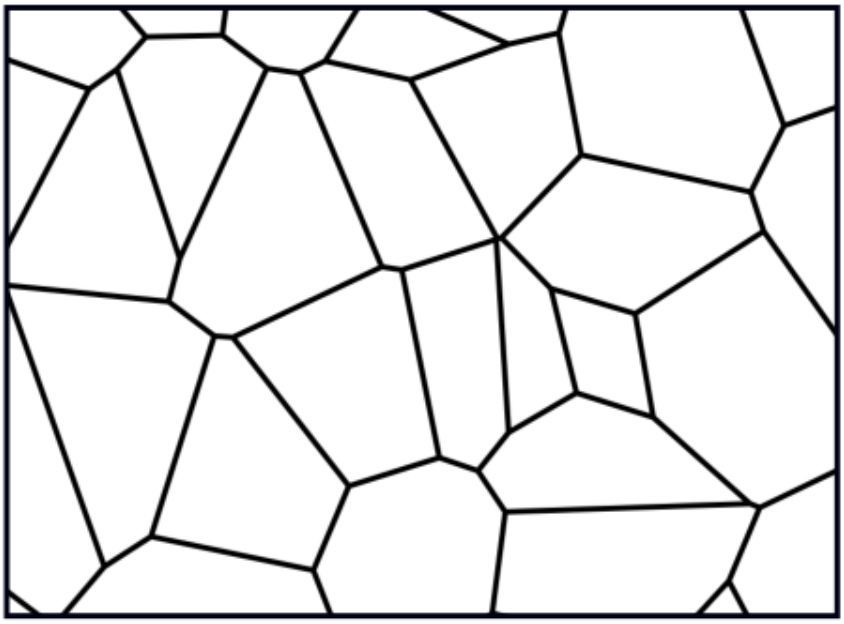
Way 1 to create a cool laserable Voronoi pattern

Way 1 to create a cool laserable Voronoi pattern

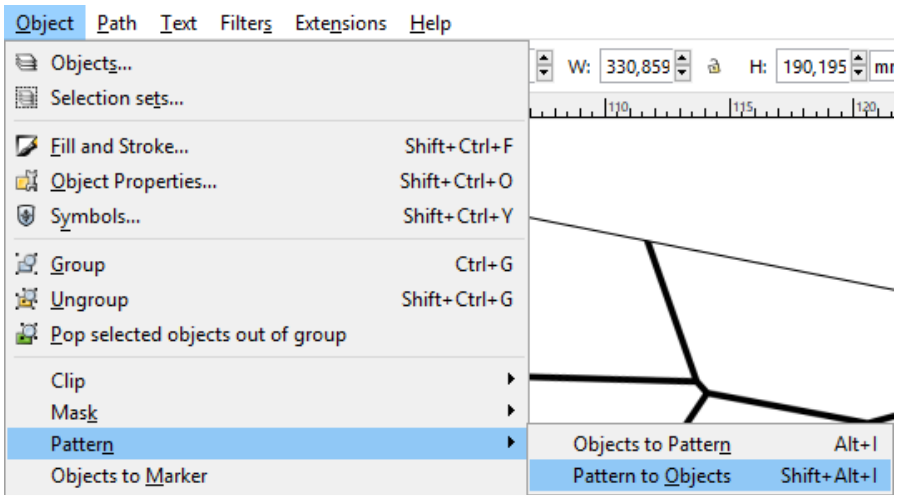
Draw some path (convert your rectangles/objects to path. We need it later for destructive clip)

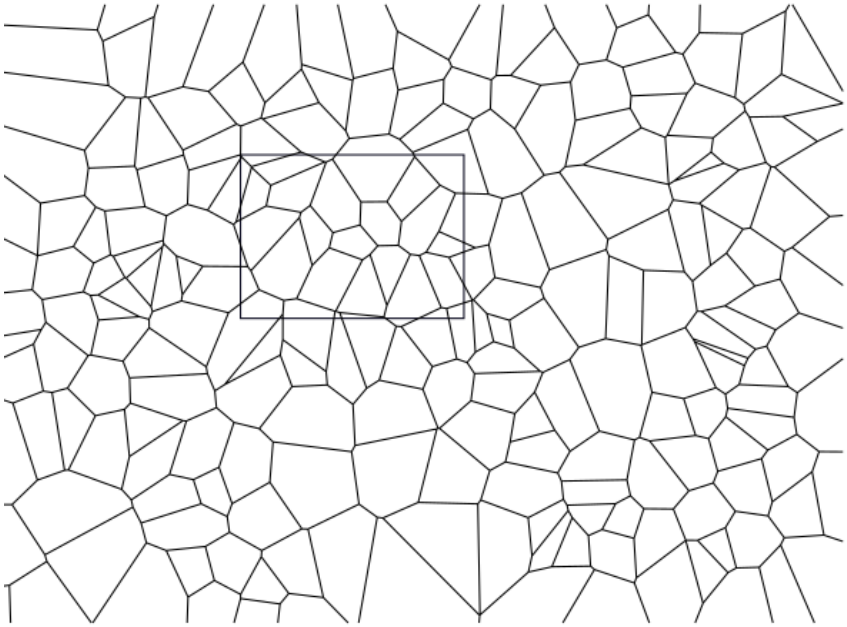
Create Voronoi



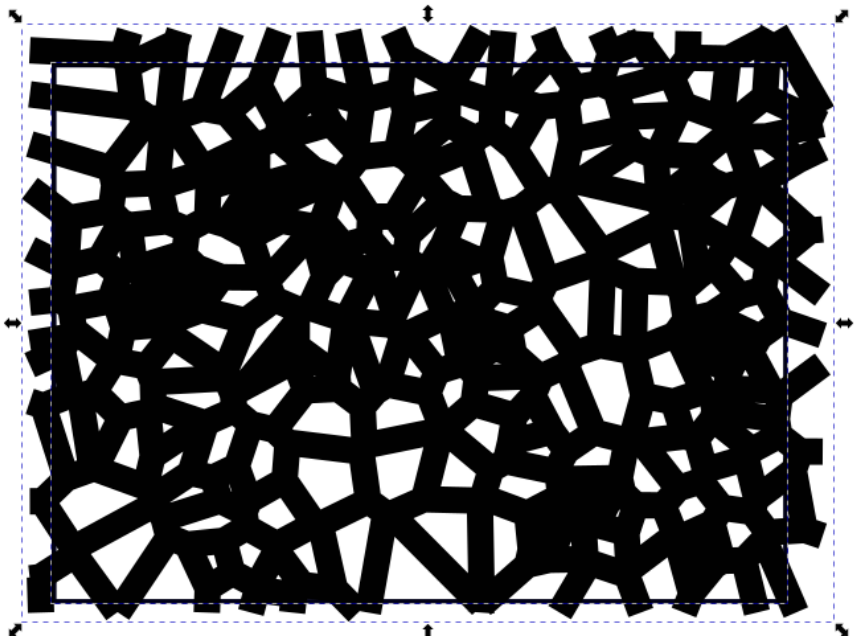


Detach the pattern

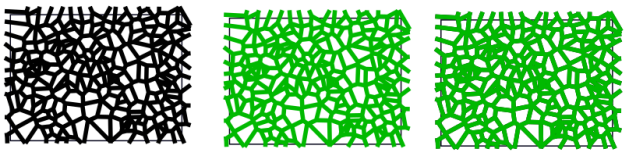


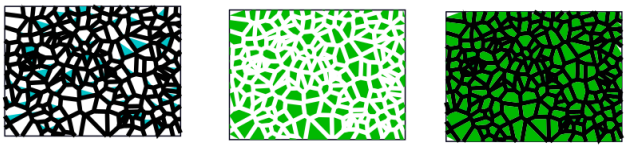


Adjust some sizes and adjust stroke width (e.g. 5 mm), remove fill



Convert contour to path → this keeps the original path in background and creates a new. Belonging to the selection we get different results using Destructive Clip

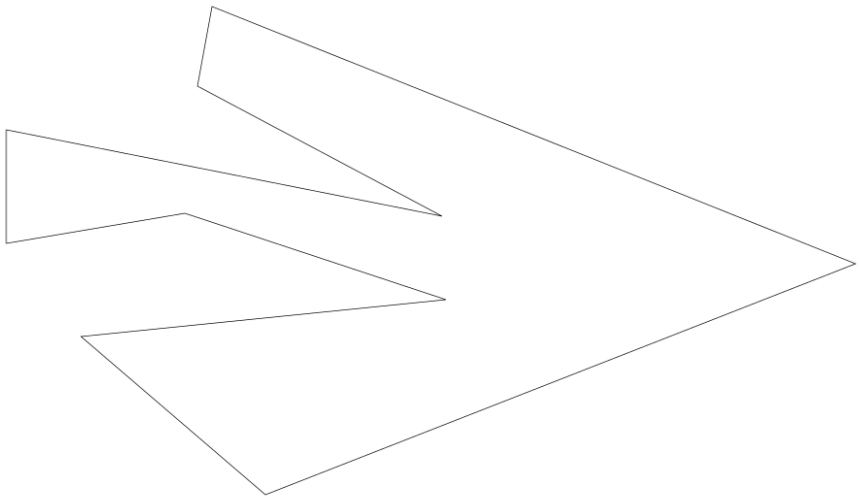
	Original path + destructive clipping / Outline path + destructive clipping / Outline and original path + destructive clipping
Before	

	Original path + destructive clipping / Outline path + destructive clipping / Outline and original path + destructive clipping
After	
After adjusting fill to zero and stroke width to 1px	

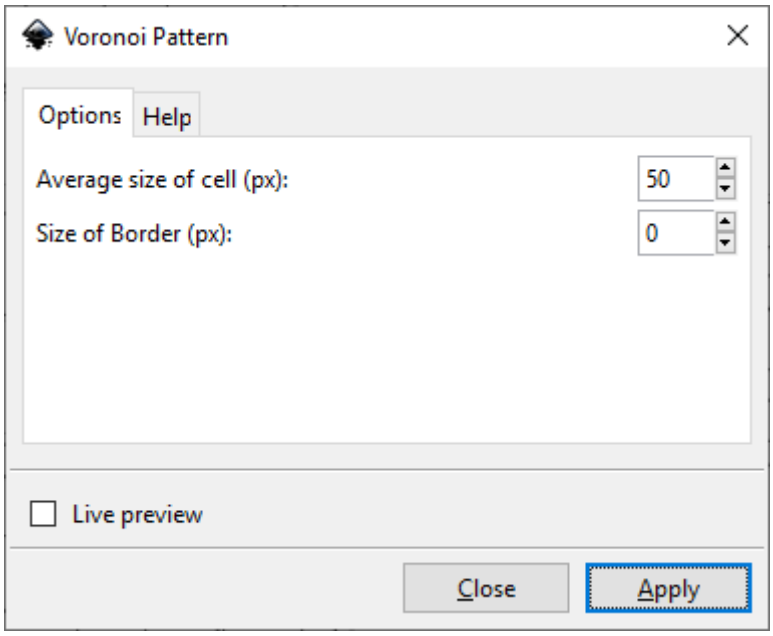
Way 2 to create a cool laserable Voronoi pattern

Way 2 to create a cool laserable Voronoi pattern

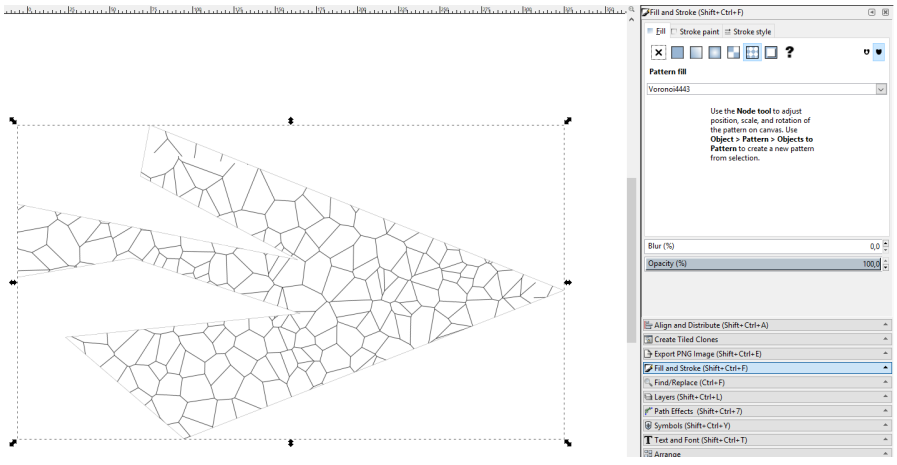
Draw some path



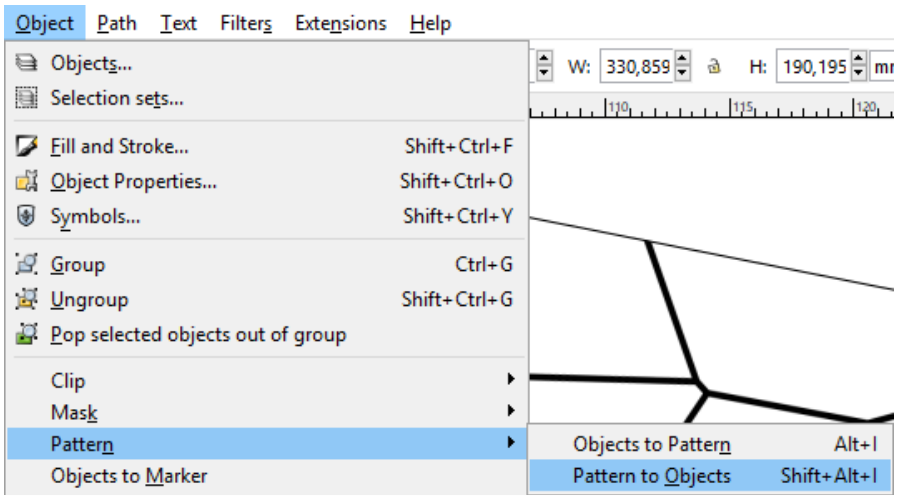
Apply Pattern

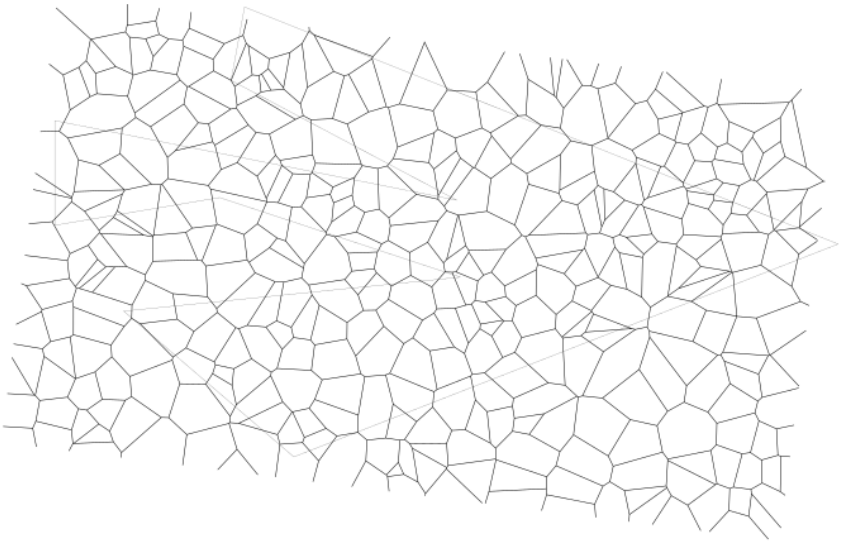


See the generated fill pattern

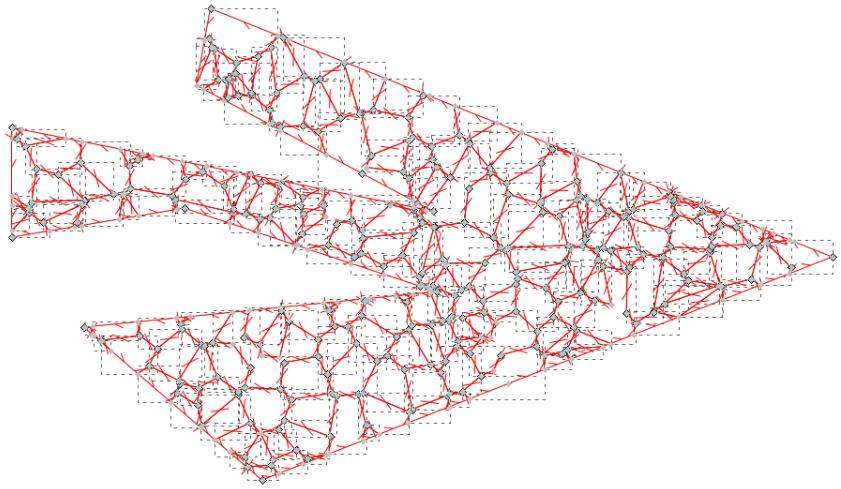


Covert pattern to object

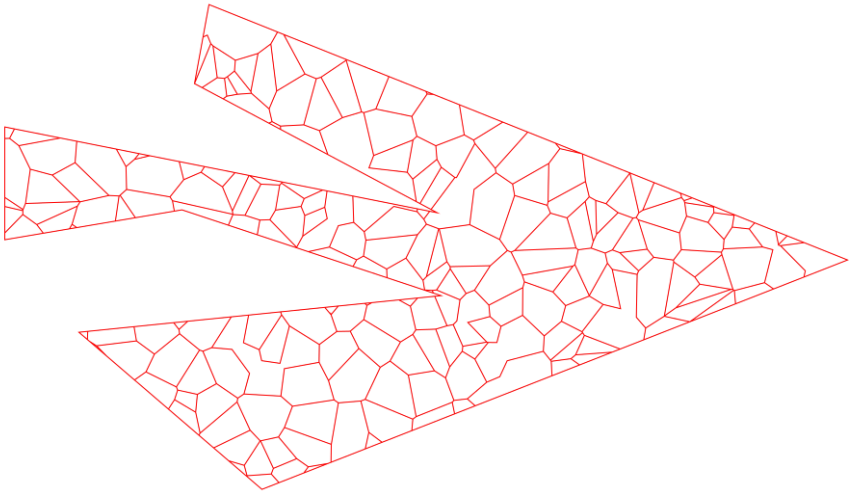




Path → Division: Select the boundary path and the pattern



Combine to have one path



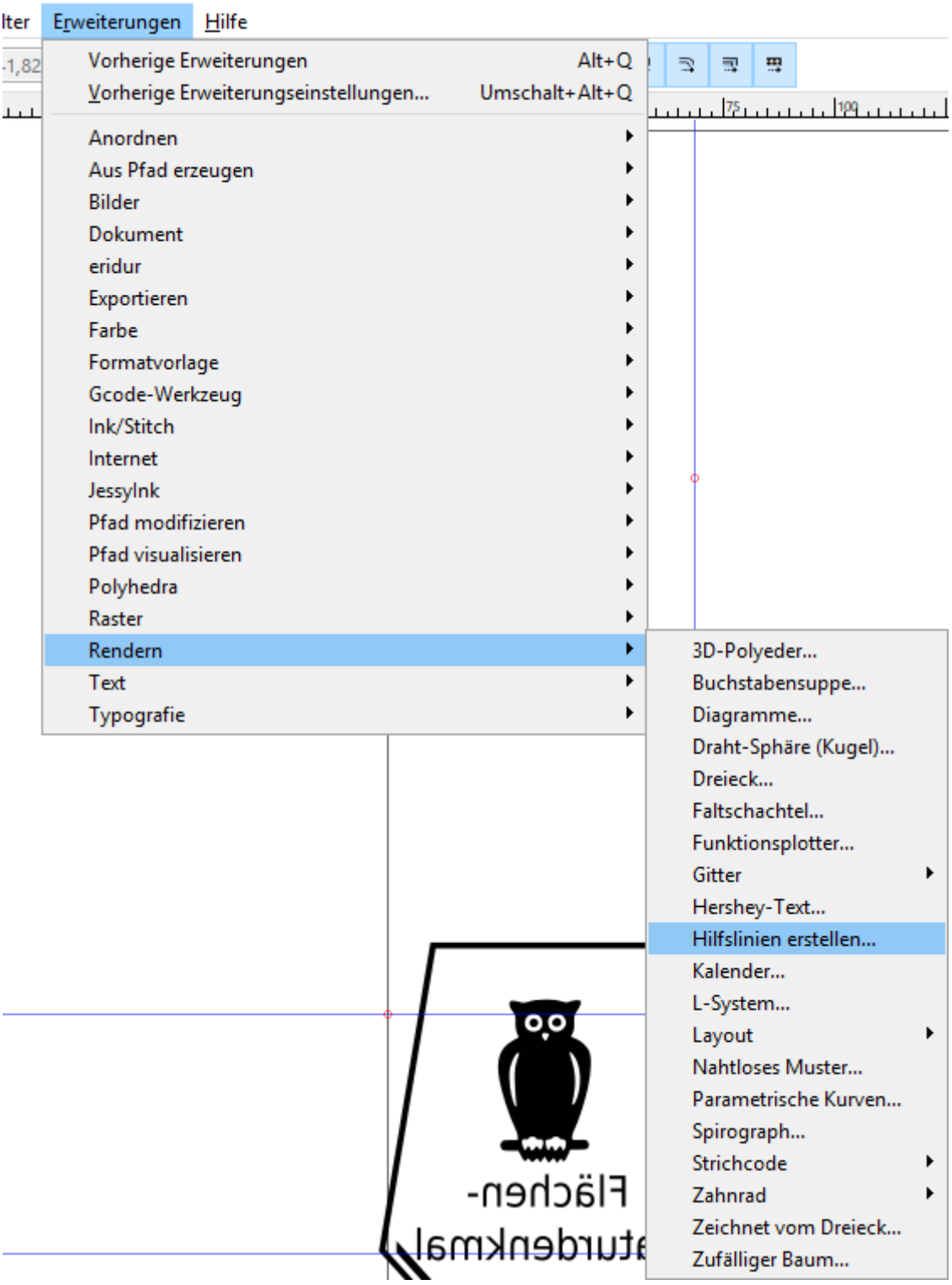
See also https://www.instructables.com/id/Delaunay-Mosaics

Export

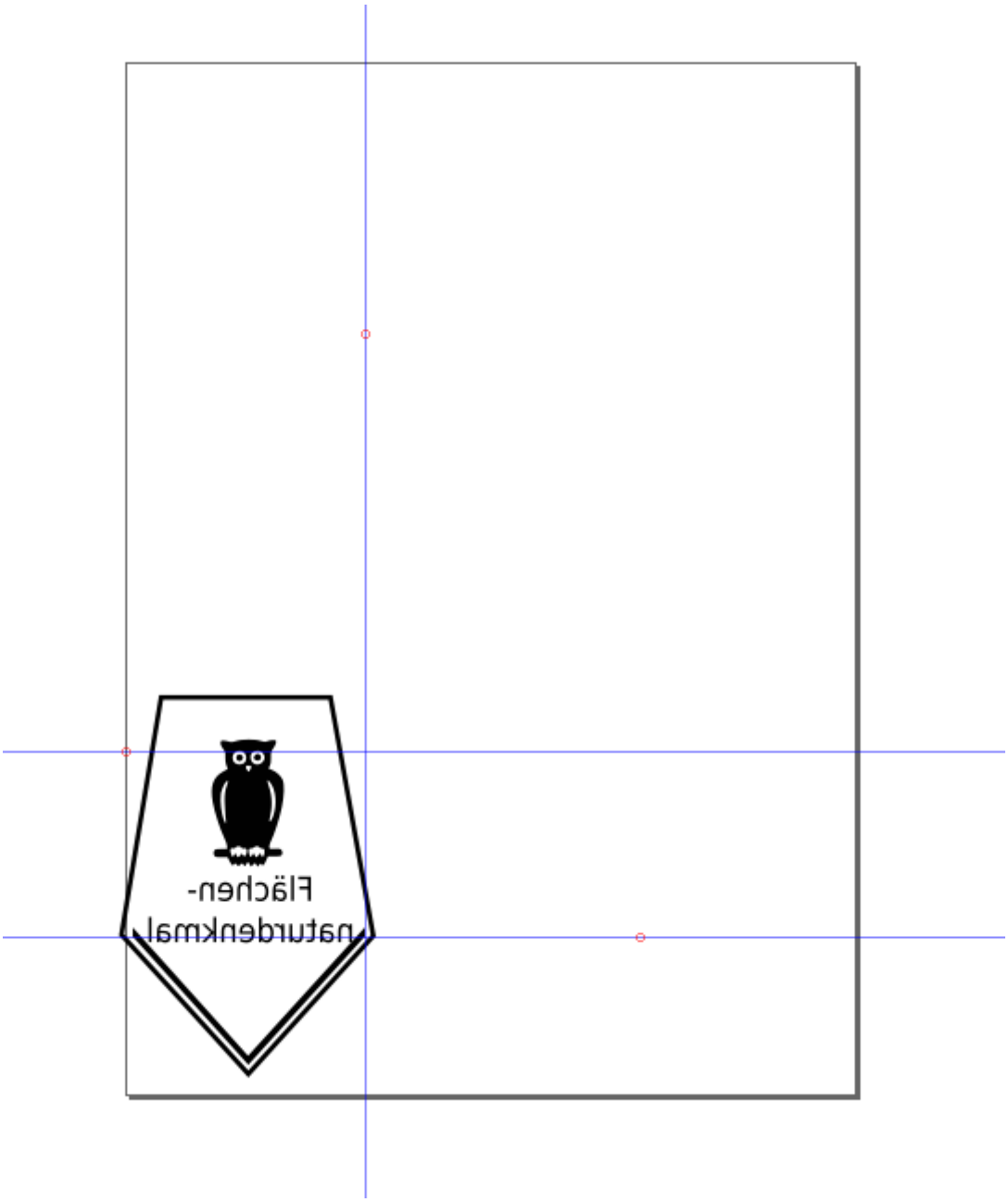
Export

Guillotine (Papierschneidemaschine / Segmentieren)

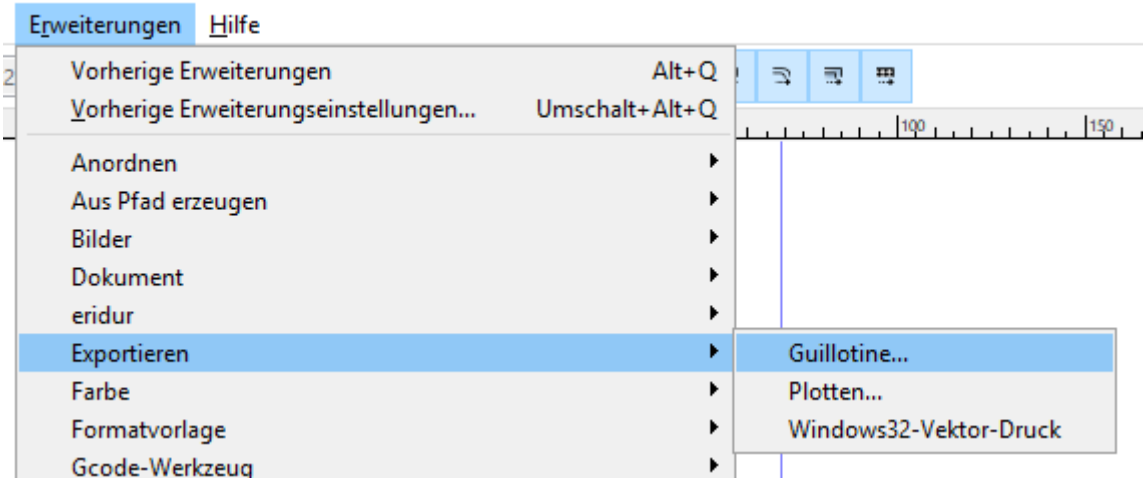
Hilfslinien einfügen



Linien nach Belieben verschieben



Exportieren



Bauchspeckdenkmal1.png

Bauchspeckdenkmal2.png

Bauchspeckdenkmal3.png

Bauchspeckdenkmal4.png

Bauchspeckdenkmal5.png