Blurring Techniques - Part 2 by tatasz on DeviantArt

Some methods to add cool blurs to your fractal, requested by BoxTail
The parameters are for learning purpose only. Please tweak a lot and credit back.

Part of Structured IFS tutorial collection.

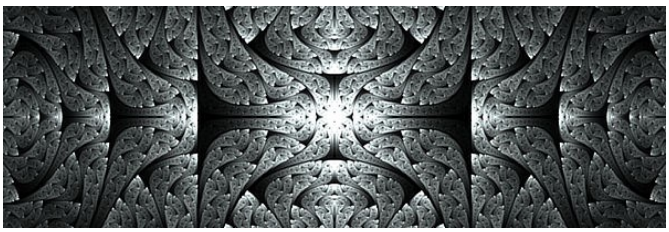
" **Structured IFS tutorial collection** well, as usual, i need your help with this bunch of tutorials.
What should i write about? Is there anything you wanna know? Please ask, i´ll write about it ^^
If you wrote / want to write cool tutorials about structured IFS, poke me, i´ll add it to the collection.I need feedback Is anything too crappily written? Is it messy / unclear? Do tell!
Update Log:
2016 / 04 / 06 - Advanced Linear Tilings added
2016 / 03 / 20 - 2 new tutorials: Glynnsim and more on hypertiles.
2016 / 03 / 08 - 2 new Tutorials, and a bit of organization
2016 / 02 / 23 - Second blur tutorial added2015 / 11 / 23 - 3 tutorials added to list
XAOS
Xaos:
Xaos Basics
Linked Transforms
Shared linked transformsShared linked transforms - Examples"

Starting Parameters

As example, we will use basic elliptic splits parameters. Lets make it:

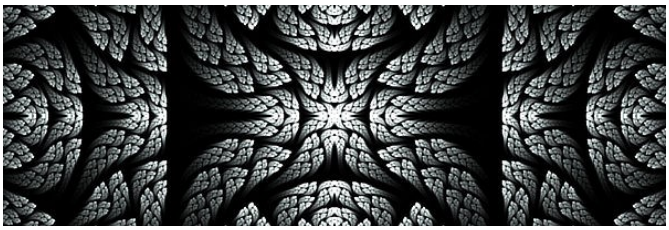
1. Start with a blank flame
2. On transform 1, replace linear with elliptic = 1
3. Rotate it 90 degrees CCW
4. Scale transform 1 down
5. Add a new transform
6. On transform 2, replace linear with splits = 1
7. Set splits_x variable to 1
8. Rotate transform 2 90 CCW
9. Scale transform 2 up by 200%

Or just grab the parameters here: Starting Parameters: Elliptic Splits



Trick 5. Spherical to send blurs to infinite

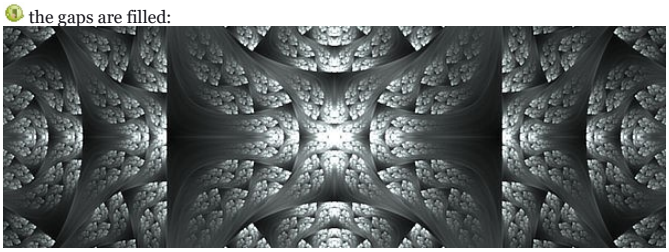
Sometimes you will have some empty ares in your fractal that cannot be filled by placing elements close to the origin. For example, below, you have those black gaps:



To fill those gaps:

1. Add a new transform
2. Replace linear with radial blur (small amount like 0.01)
3. Reduce the weight of this new transform (a lot, to something like 0.001-0.05 usually)
4. Add a linked spherical to it

the gaps are filled:

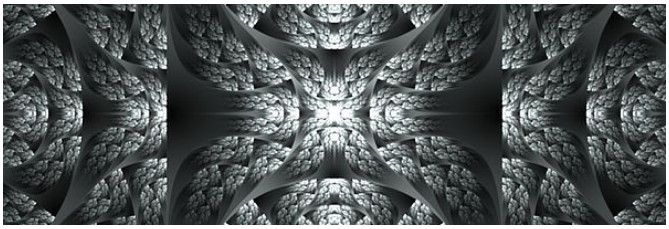


Check the parameters: Splits with blur at infinite

Now, this i learned from zyorg - and i'm sure he had some more intelligent way to do it, but i am a dummy and cannot remember it.

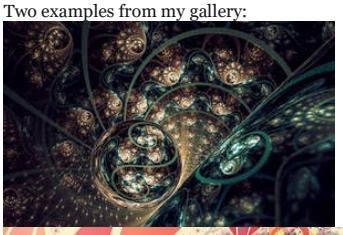
There is trick to do it better even. The gaps are mostly caused by elliptic. So your blur bust have same shape as the elliptic (elliptic maps the whole place to a strip, so you need a vertical strip). So...

1. Replace the radial blur with sineblur (0.3 - 0.4)
2. Go to spherical transform and add another linked transform to it, this time with polar
3. Duplicate the polar transform
4. For the second polar transform, flip vertically the post transform



This second trick is specially useful when you may have overlap issues otherwise. You may replace 2 polars with 1 crop, for example, or use other variations - like elliptic itself

Two examples from my gallery:



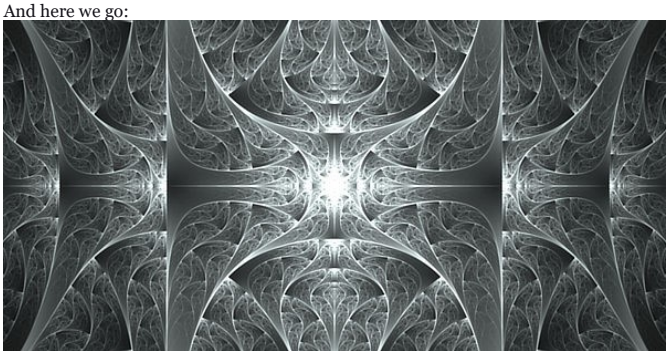
Trick 6. Overlay with blurry cylinders

Another trick based on what zyorg shared.

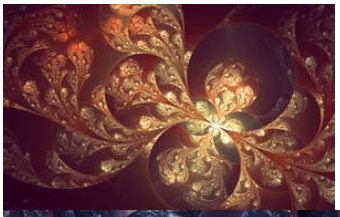
This trick produces an effect similar to the previous one. The step by step is:

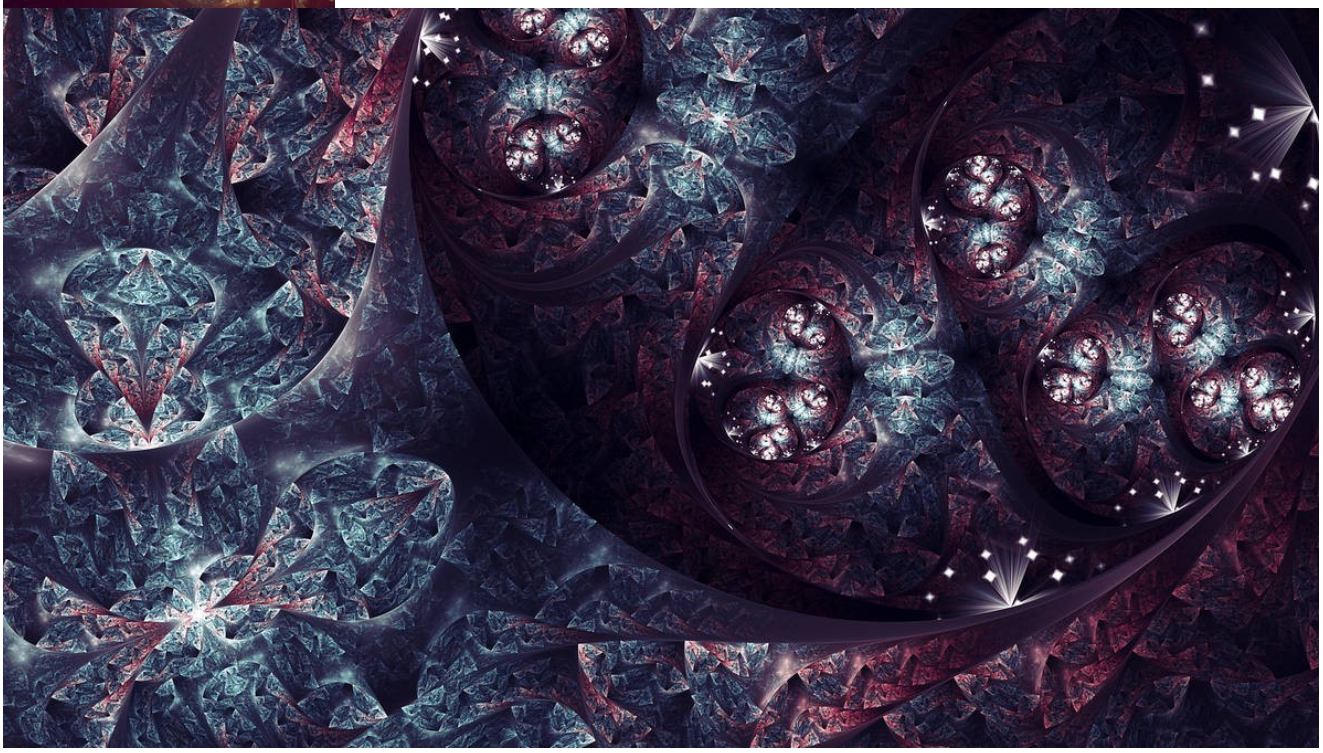
1. Add a new transform
2. Replace linear with cylinder and pre_blur
3. On transform tab, change the post transform y value from 1 to something like 20
4. Lower the transform's weight

And here we go:



Examples from my gallery:





Trick 7. Duplicate transforms and blur them up

Blurring removes parts of the pattern that you like? Easy, keep both by duplicating a transform and blurring one of the copies.
This trick works better when your blurring does not distort a transform too much.

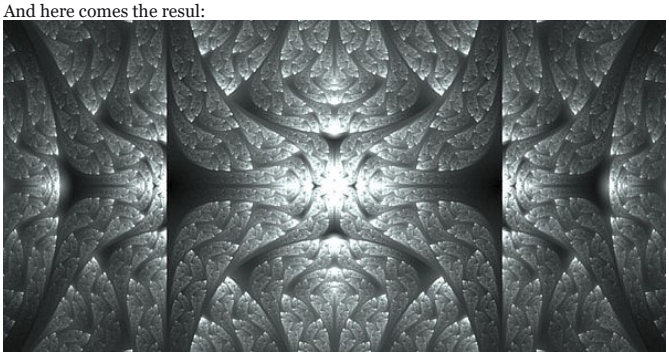
Let's try an example:

1. Duplicate the elliptic transform (xform 3)
2. Add a pre linked transform (xform 4) to the duplicate
3. On pre linked, replace linear with spherical
4. To this second transform, add a new linked transform (xform 5)
5. On this (xform 5), replace linear with pre_blur and spherical
6. Lower the weight of the transform with only spherical (xform 4)

If you had any trouble, check out the parameters: Duplicated Elliptic

I used the 2 linked sphericals with pre_blur in the middle to force it to blur more the extremes, rather than the middle of the fractal.

And here comes the resul:

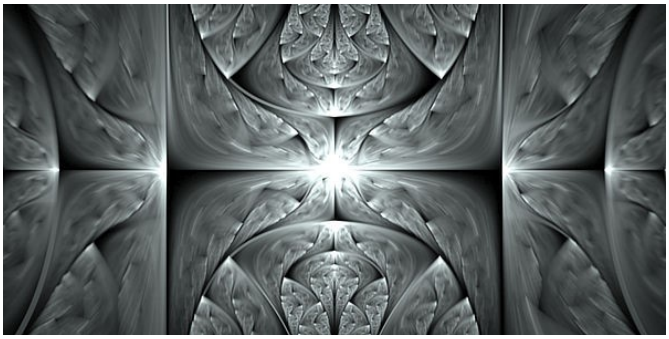


Trick 7. Epispiral

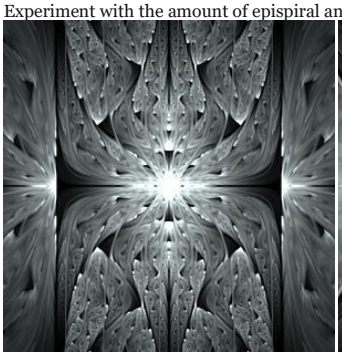
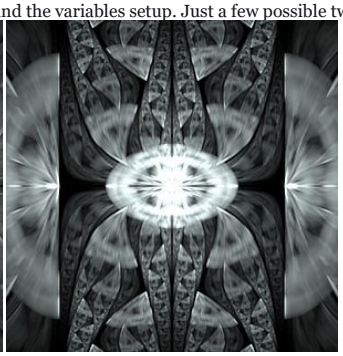
I figured this one out by looking at fractals by lindelokse and Xyrus-02 - although most likely it is not exactly how they do it:

1. Add a pre linked transform to elliptic
2. Keep linear, and add a small amout of epispiral to it (lets say 0.05)
3. On variables, set n to 1, thickness to 1 and holes to 0

Here we go: Elliptic with epispiral



Experiment with the amount of epispiral and the variables setup. Just a few possible tweaks:

And, as usual, examples from my gallery: