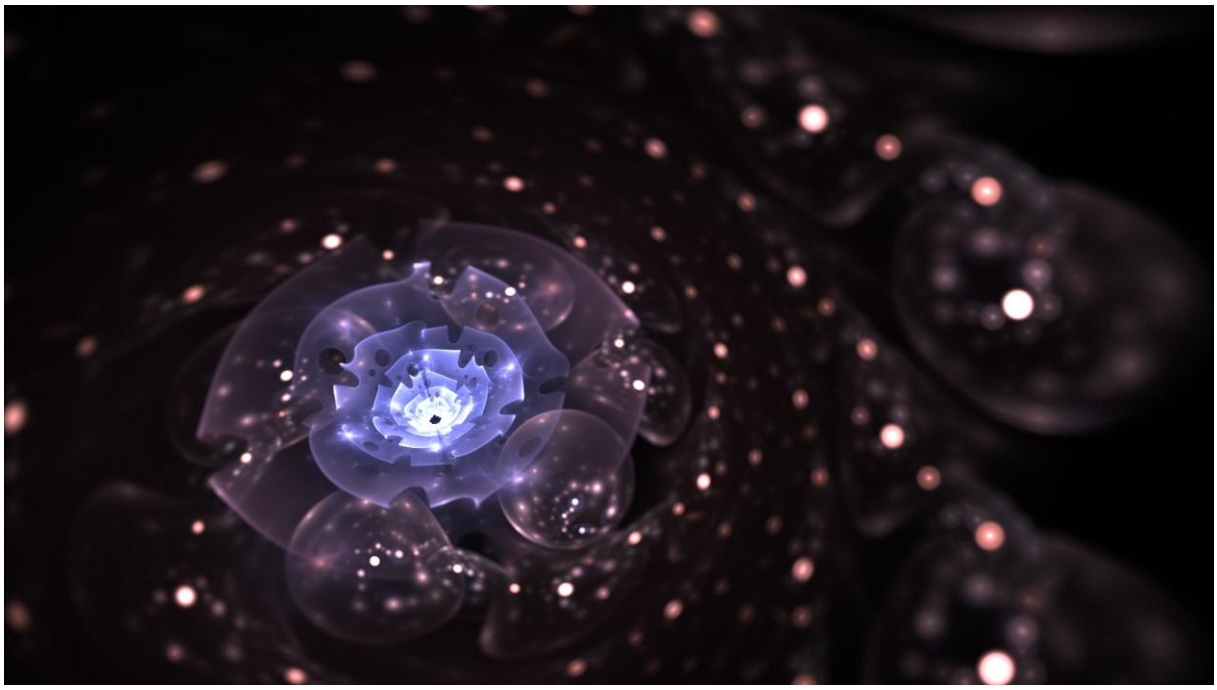

JWildfire tutorial on: layerz

by thargor6 (http://thargor6.deviantart.com/)

Version 0.3

This tutorial describes how to use the new "layerz"-feature introduced with version 1.1.

All you will need is a recent copy of JWildfire (Version 1.1 or higher is required) and some (own) flames to play around.

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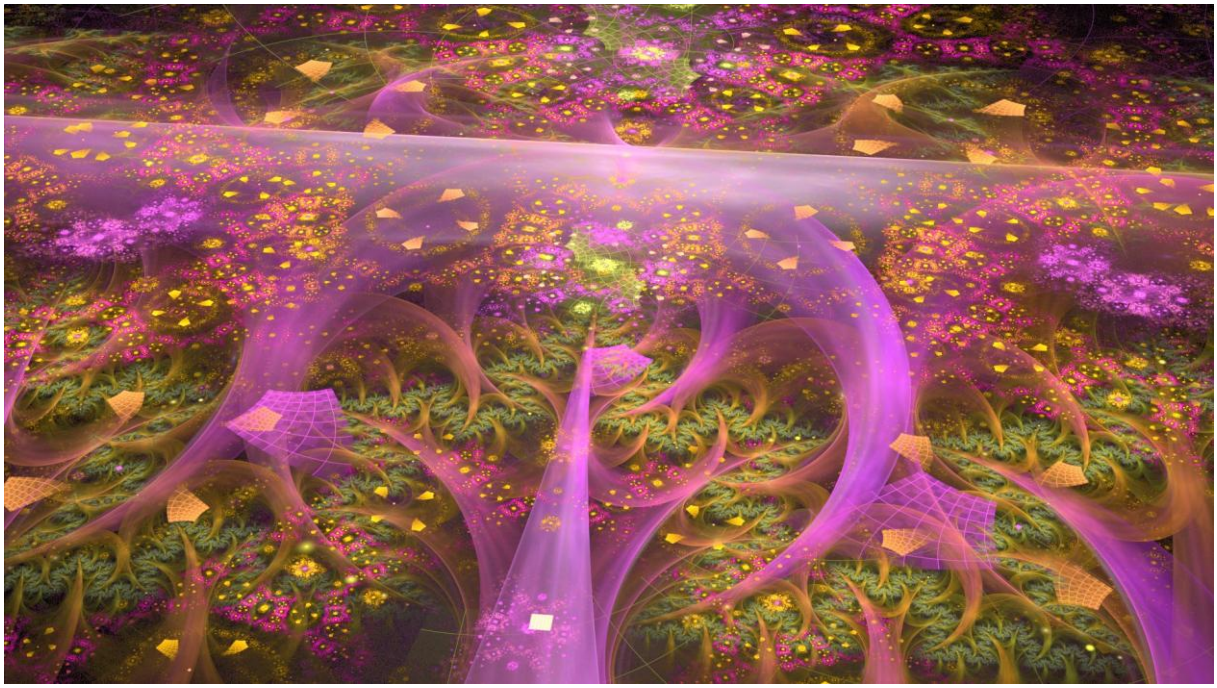
1 Introduction



"Layerz" (derived from the word layers) is another innovation in JWildfire which was designed to increase your productivity and fun while creating fractals.
Layerz allow you to create complex flames by composition of other fractals. Unlike to using traditional layers in image processing software, the layerz in JWildfire are still fractals which are "alive" and can be modified as you know it from regular flames. So you can edit each layer before rendering the final image.
Additonally, layerz respect that flames have three coordinates, so each layer can be moved freely in space before rendering the image. (But please note that it are still flames and not solid objects, so all flames will overlap if you design them that way)

Each layer has its own:

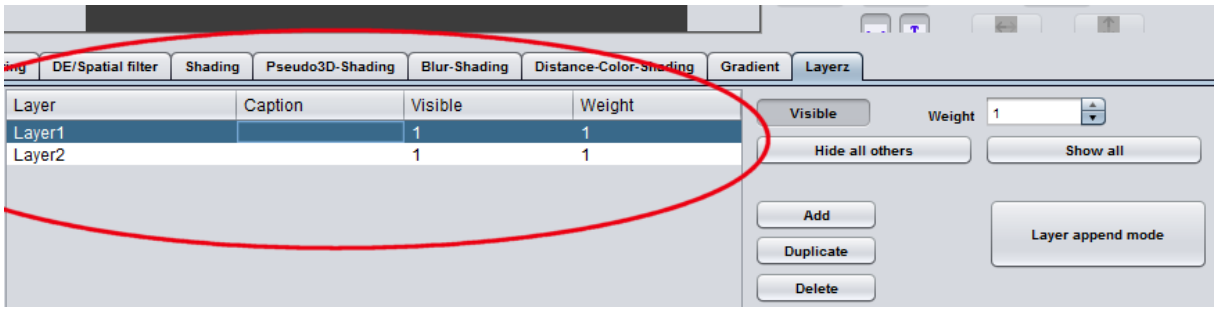
- set of transforms
- set of final transforms
- gradient

All camera- and shading-settings affect the whole flame (i.e. all layerz).

2 The new layerz tab

For managing layerz there is a new tab in the bottom area. If you do are not interested in layerz just ignore it, you will never need it :-)

All available layers are listed in the main table of this tab.



Per default a flame consist of only one layer (and must have at least one layer).

2.1 Basic manipulations

There are basic functions for manipulating layers:

- **Add** (to create a new blank layer with a new randomly created gradient)
- **Duplicate** (to create a new layer and copy all transforms, final transforms and the gradient from the currently selected layer)
- **Delete** (to delete the currently selected layer, please note, that the last layer cannot be deleted)

2.2 Layer properties

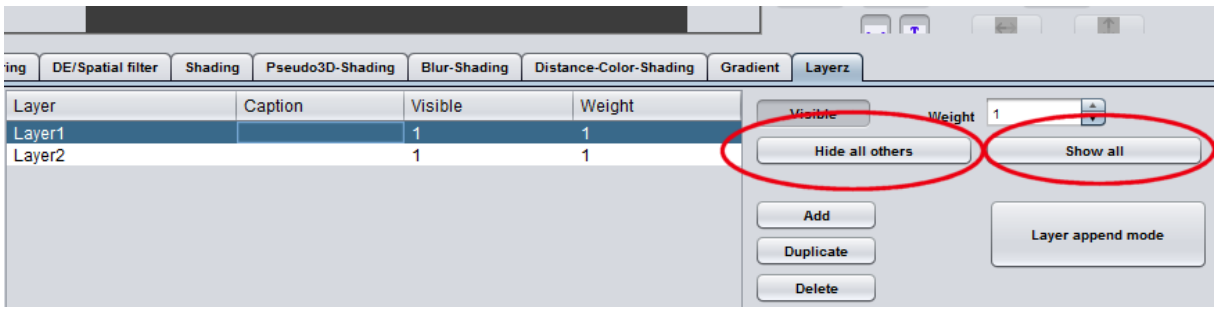
Layerz have the following properties which you can modify:

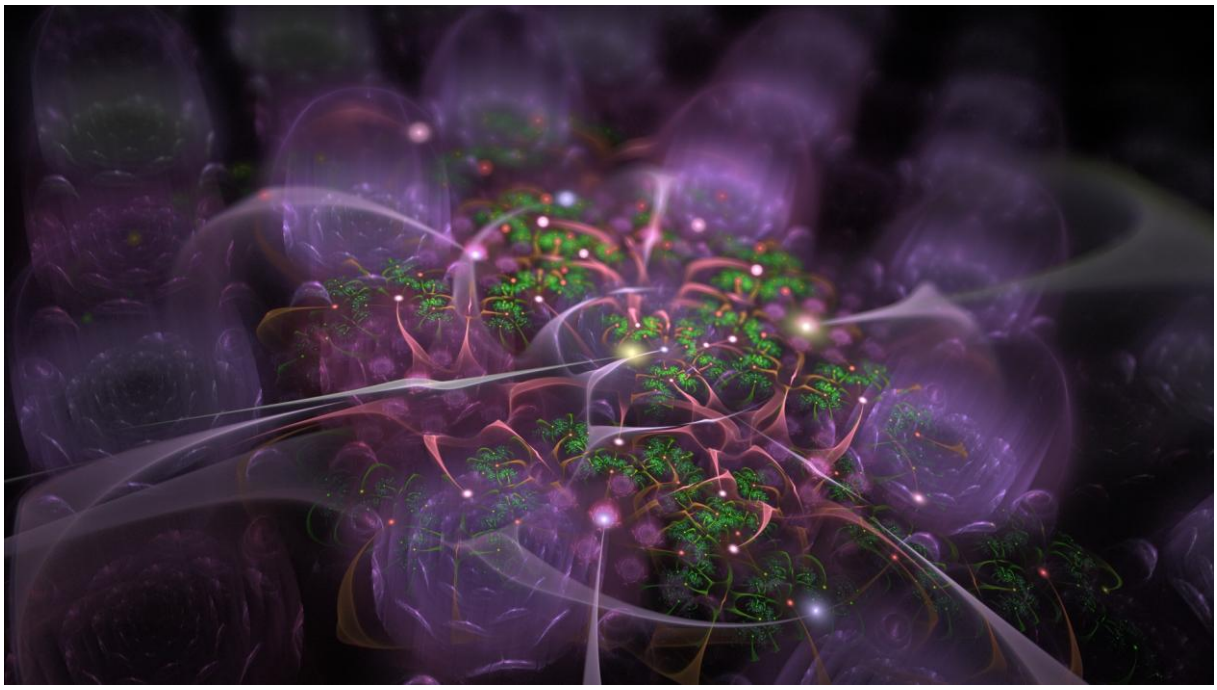
- **Caption**: a free text you give them to describe themself
- **Visible**: this property controls if the currently selected layer is rendered or not
- **Weights**: this property controls the intensity/weight of the current layer

2.3 Hiding/Showing layerz

It may be important to show/hide certain layerz to control which transform you want to edit. There are two useful function to support this workflow:

- **Hide all others**: Hides all layers except the currently selected one.
- **Show all**: makes all layerz visible

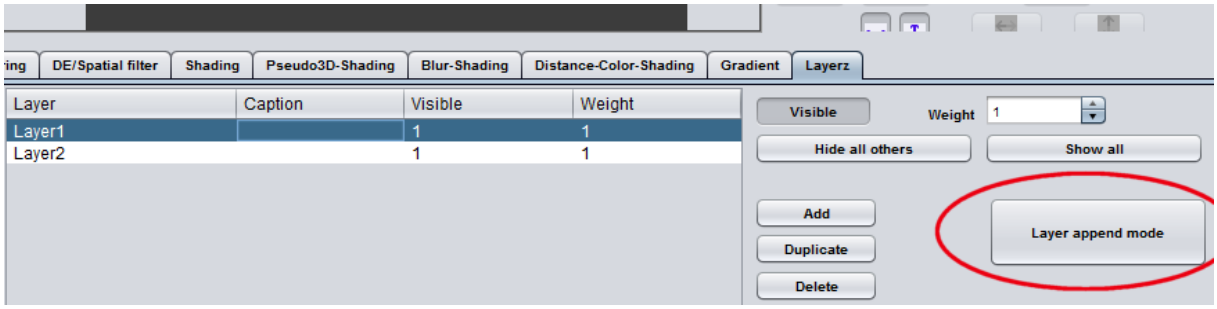




3 Composing flames into layerz

There are really many ways to get a flame into the editor of JWildfire :-) From loading from disc, from the clipboard, from the Interactive Render, from the MutaGen, from the movie editor, ...
I wanted all this ways enable to create new layerz, but without a new button at each place.
So there is ONE button to achieve this and it placed at the layerz tab. So, especially, if you dont work with layerz you won't be distracted by lots of "useless stuff" :-)

3.1 Enabling "Layer append"-mode

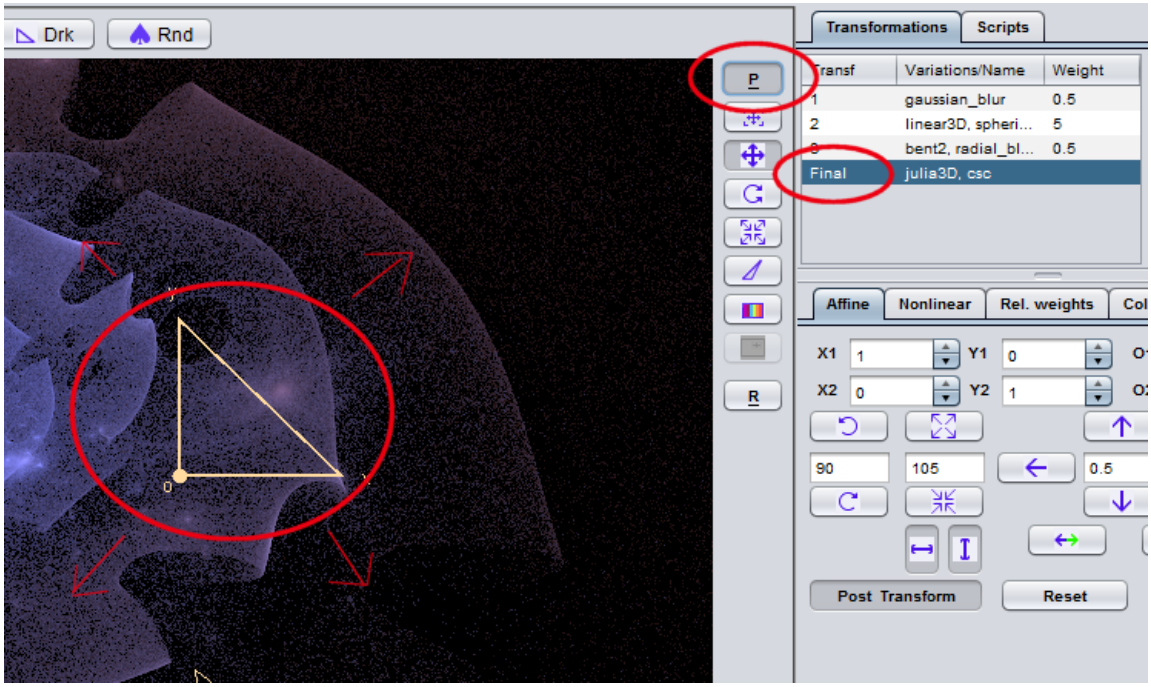


If you activate the button "Layer append mode" on the layerz-tab, every fractal you load into the editor, will appended as layer. Quiet powerful and easy, isn't it? :-) If the fractal to append has more layers, all layers are appended, of course.

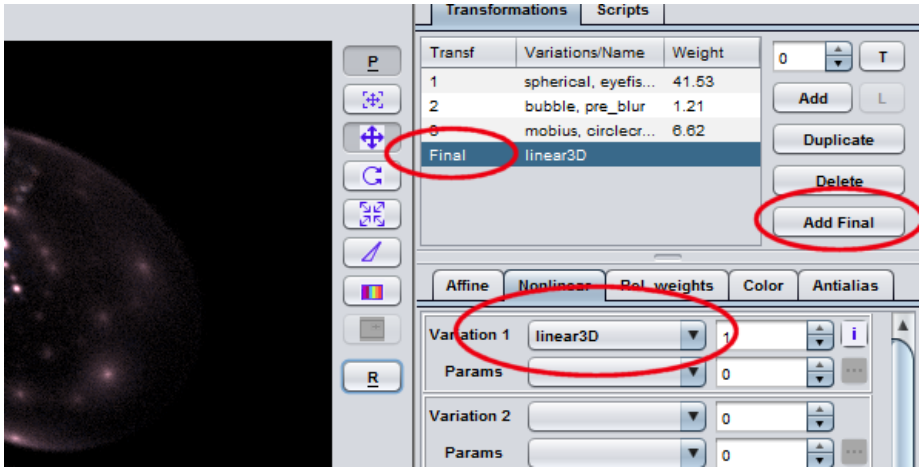
4 Adjusting flame position and orientation inside a layer

You can move any fractal (layer) freely like a 3D-object in a 3D-modeling-software. All you need is a **final transform**!

In flames which already a final a final transform just enable "Post transform"-editing-mode and you are able to drag, rotate and scale the fractal in the x-y-plane by using the mouse.



If your flame has no final transform yet, just add one and leave the default variation to "linear".



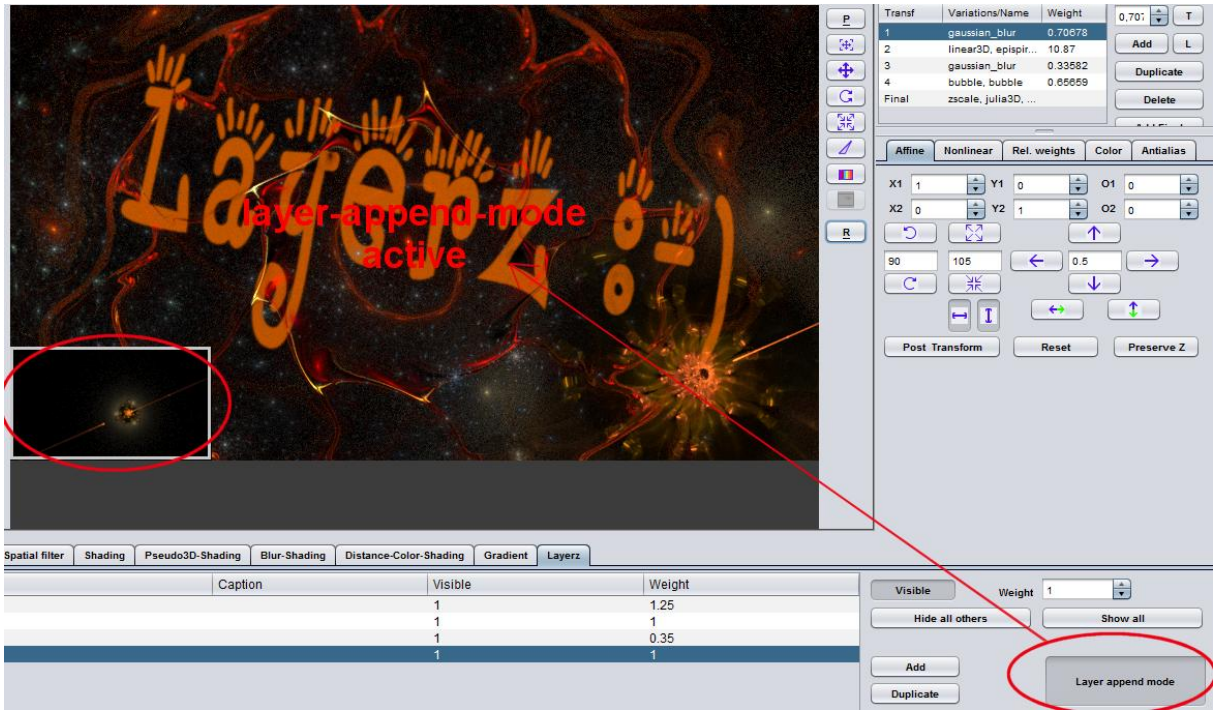
If you work with 3D-fractals you may also want to modify the fractal along the z-axis. This is also easily done using the final transform, but you have to add variations which perform the desired transforms as:

- **post_rotate_x** and **post_rotate_y**
- **post_ztranslate_wf**
- **post_zscale_wf** etc.

5 Layer indicators

There are two indicators to help you to work with layers:

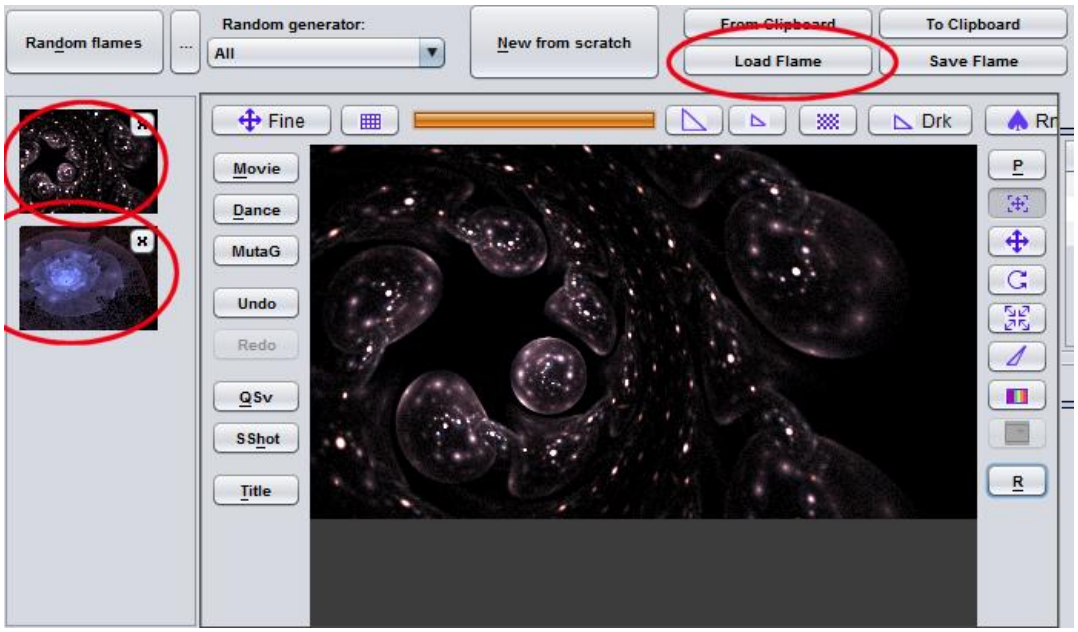
- A red text "layer-append-mode active" on top of your preview if the append-mode is on (because it may be very irritating if it is on and you are not aware of this)
- A small realtime-preview of the currently selected layer on top of the main preview. This preview is only visible if you have more than one layer and more than one layer is visible. So if you hide all layers except one (for fine-tuning of this layer) the small preview is hidden and does not distract you.



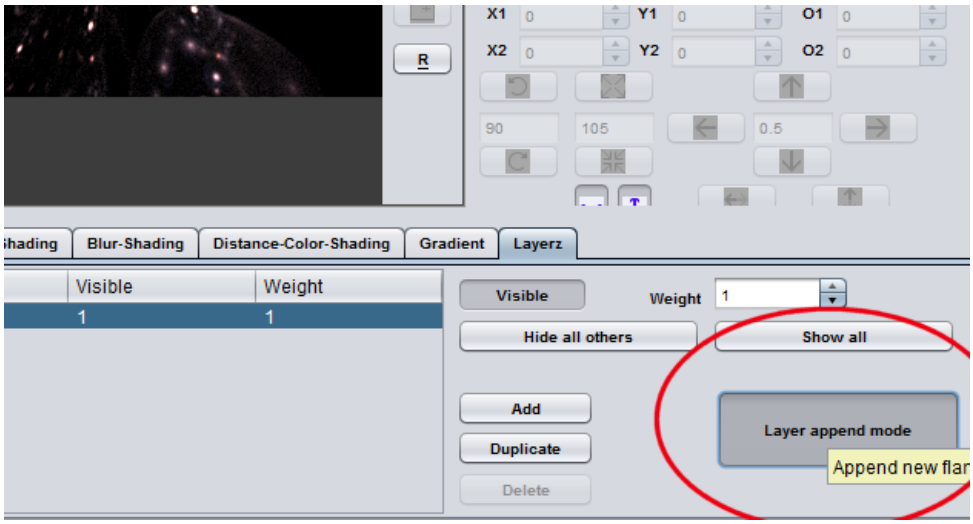
6 Simple example (composing a 2D and a 3D flame)

I just had the idea to compose one of my 3D flowers and a bubble fractal into one. The result is the image at the start of this tutorial and is called "A little light of hope".

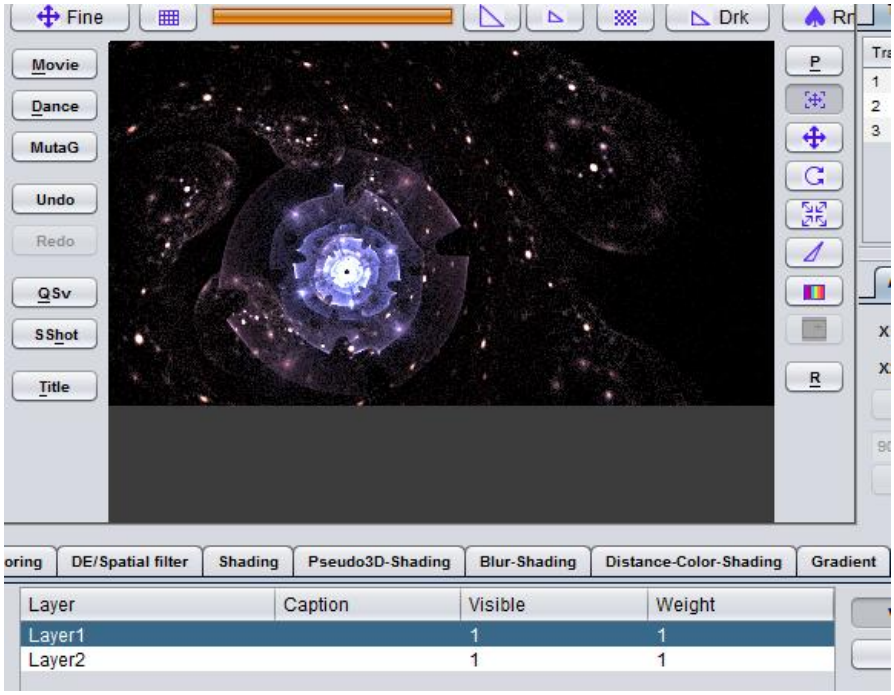
I just loaded both flames into the editor and activated the bubble-fractal:



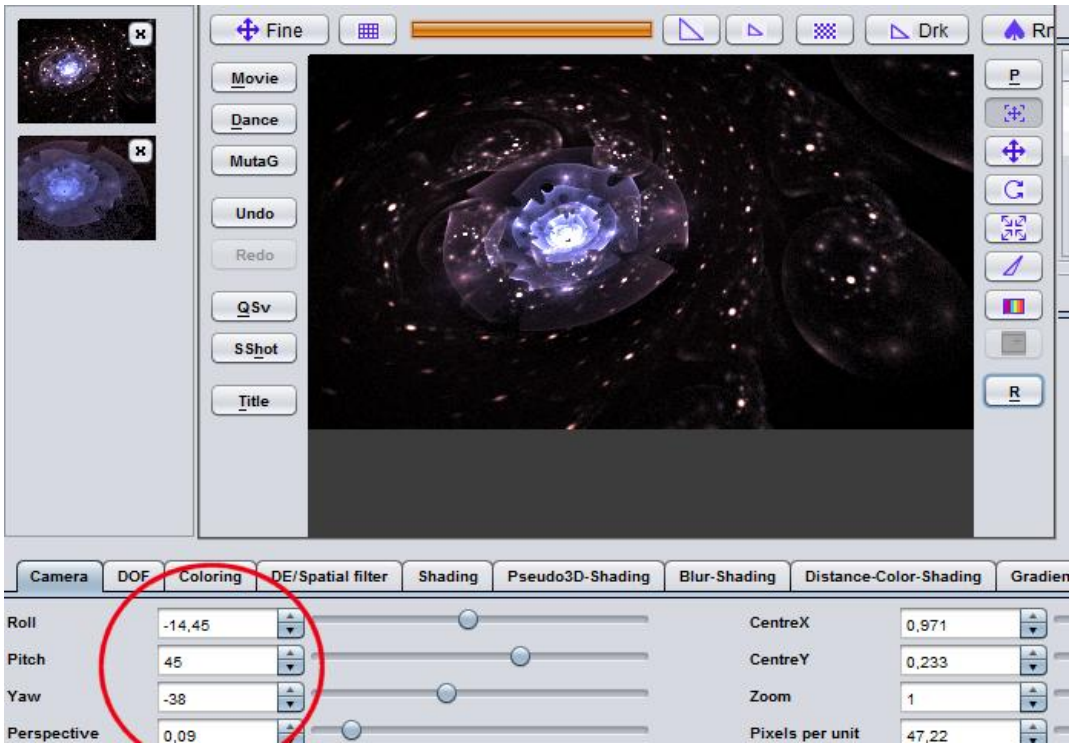
Then I entered the layerz-tab and activated the "Layer append mode"-button:



Then I double-clicked at the flower (i.e. loaded it into the editor, but in the layer-append-mode it was just added as new layer):



Then I played with the camera and DoF settings to give the fractal the final touch:



Now, this is the end of this tutorial. I wish you much fun to play with your own flames!
And, to cite the slogan of the famous forum **fractalforums.com :**

"The Possibilities are Infinite" :-)