

**Tips For Texturing With Crackle**  
An Apophysis tutorial for intermediate and advanced users



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## Introduction

**How *did* I do that?** I've received several notes asking for tips about how I accomplished the texture on the spirals I uploaded this fall (2008). It's embarrassing to admit that I couldn't respond to those notes other than to say, "I have no idea how I did it, but when I figure it out I'll let you know."

This was not an attempt to keep some super-secret technique to myself. The problem with writing a tutorial, for me, is that most of the time I have no idea what I'm doing in Apophysis.

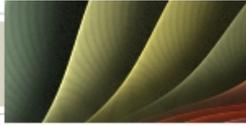
I'm an Apo-dabbler. I scoot things around; I drag slider bars; I add a bit of this variation, a bit of that one; I resize, flip, and rotate, save when I see something I like, then continue tweaking. Thankfully, I save often, because this is the only hope I have of trying to show/teach someone how I've arrived at a method.

Where to begin? At the beginning, of course. The first several pages display examples of designs using this texturing technique, followed by images and descriptions of each step I took, including the false starts and backtracking, as they produced results that may be helpful in developing your own textures.

There is a parameters file included that shows each of the steps in the "How To" section, but there are many more specifics within the text regarding variations and variables to be explored. You will also find links to resources and other tutorials you may find useful in creating your own starter flame on which to practice and develop this technique.

Continue on to the next page for a look at my starter flame and examples of its descendants, followed by a step-by-step breakdown comparing the starter to one of the finished pieces.

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## The Ancestress and Her Descendants

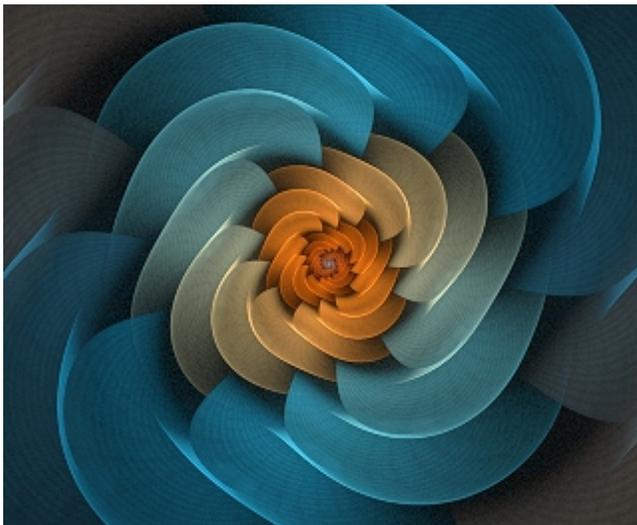
On this page are several examples of textured-spiral designs that are descendants from the same starter flame, which wasn't a starter at all, at first; it was a piece I uploaded to my deviantART gallery in January, 2007, titled *The Coppersmith's Garden*, which I created using The Blob Spirals tutorial by Peter "Zueuk" Sdobnov. A link to this tutorial can be found in the Resources.



Uncropped version of *The Coppersmith's Garden*



*Rosa Canina Erratica*



*Whistling In The Dark*



*Vestibular Woe*



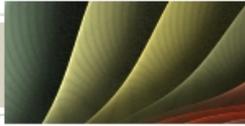
*Jardinere*



*Noel Asphodel*

On the next page I'll show, step-by-step, how *The Coppersmith's Garden* developed into *Rosa Canina Erratica*.

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## In the Mad Apophysian's Lair

In September 2008 I saw a piece called *Replicant Motives of a Cyborg* by Travis Williams (deviantART user Platinus), and sat staring at it, wishing I could create textures like that myself. Travis kindly pointed me in the direction of the Apophysis plug-in necessary - Crackle - and I rolled up my sleeves and started concocting.

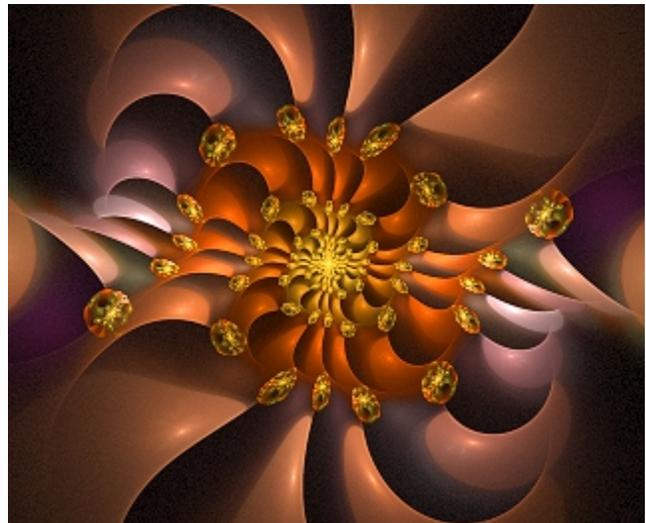
Months later, in order to show others how I'd accomplished the texture on *Rosa Canina Erratica* and others, I had to backtrack through dozens of saved parameters. I was surprised by how many steps, and missteps, I made. There was no rhyme nor reason to the changes I made; I tried a bit of this, a bit of that, learning what worked and didn't work along the way.

I have left the missteps intact, along with the notes detailing the changes I made, as they may well serve for further development by someone else. These pages are merely for illustrative purposes; the next section will pare things down to a few simple steps.



### The Base Flame

T1: Spherical, Blur  
T2: Linear, Spherical  
T3: Bubble  
fX: Julian



### Step 1

Using the Chaos tab, added T4 linked from T2, and T5 linked from T3.



**Step 2**

T1: Added Crackle  
T3: Added Crackle  
Crackle variables left at default.  
T5: Adjusted Linear value; added Bubble.



**Step 3**

Deleted T3.

(T4 becomes T3; T5 becomes T4. With this change, T3 is linked from T2.)



**Step 4**

Gradient change.  
Added T5, linked from T1.  
T5: Crackle



**Step 5**

T1: Removed Spherical  
T2: Decreased weight  
T3: Decreased Linear value  
T5: Added Droste



**Step 6**

Deleted T4.  
(T5 becomes T4. With this change T4 is linked from T1.)  
T4: Adjusted Crackle variables and Droste value.



**Step 7**

T4: Removed Droste; adjusted Crackle variables.

**NOTE:** Though I removed Droste and continued on, I did return to this point with the Droste variation intact and continue working to produce *Whistling In The Dark* and *Vestibular Woe*.



**Step 8**

T4: Added 0.1 Linear.  
fX: Adjusted Julian variables.



**Step 9**

T4: Adjusted Linear value, from .1 to .006.



**Step 10**

T4: Removed Linear.

T4: Added Spherical and Diamond.



**Final Image**

T1: Spherical, Blur, Crackle

T2: Linear, Spherical

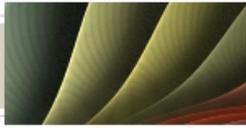
T3: Linear

T4: Spherical, Diamond, Crackle

fX: Julian

Crazy, eh? I thought so too, once I waded through all those parameters and saw how many times I added and deleted transforms. After dissecting what I'd done, I realized there are really only a few steps necessary to texture a design with Crackle, and it all rides on the X factor. The Xaos factor, that is.

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## Getting Down to Business

This tutorial assumes a good working knowledge of Apophysis 2.08. If you find yourself uncomfortable with some of the functions or terminology, see the Resources for a recommended Beginner to Intermediate Tutorial.

Materials you will need:  
Apophysis 2.08, Crackle plugin

For the purpose of this exercise, I'll be using these settings:  
Image size: Width 640, Height 480  
Gradient Preset: 022\_orange  
Scale: 25  
Gamma: 3  
Brightness: 4  
Vibrancy 1:  
Gamma Threshold 0.01

Using settings other than these may produce images different from those illustrated. Alternately, you may load `skelltute1.flame`, which is included in the .zip file, into Apo 2.08 and use the "New blank flame" parameters. You may also use this file to load each step, but I think you'll get a better feel for the potential of this technique if you work through them yourself.

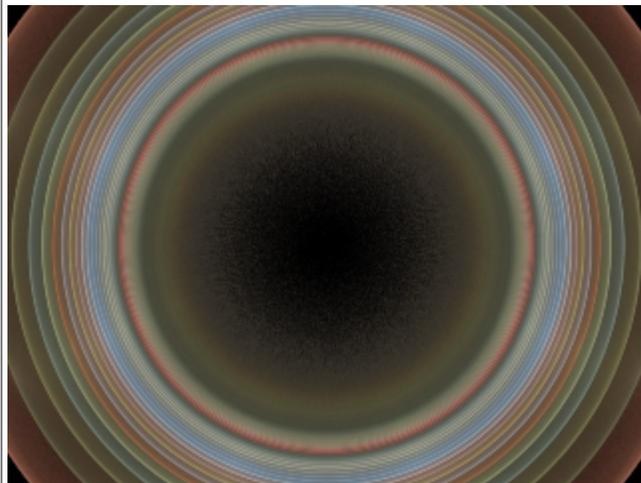
### Step 1:

In the editor, create a new blank flame. Add a transform and a final transform. Set the variations, variables, etc. to:

**T1:**  
Spherical 0.125, Blur 0.35  
Weight: 0.5  
Color 1, Color Symmetry -0.8

**T2:**  
Linear 1, Spherical 0.125  
Weight: 6  
Color 0, Color Symmetry 0.8

**fX:**  
Julian 2, Variables: Power -2, Dist 1



### Step 1

Your screen should look like this.

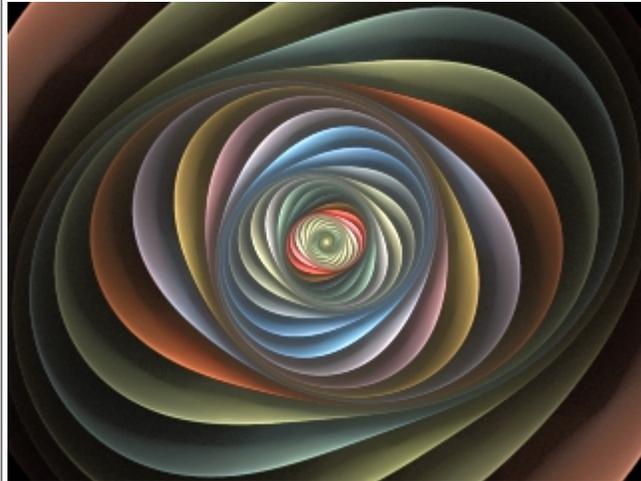
**Step 2:**

Make these changes to **T2**:

Scale up 125

Rotate counter-clockwise 45

Move up 0.3

**Step 2**

Your screen should look like this.

**Step 3**

On Xaos tab, with T2 selected:  
Right click anywhere in the Xaos window  
Select: Add linked xform

On Xaos tab, with T1 selected:  
Right click anywhere in the Xaos window  
Select: Add linked xform

Note: The 1 in the Weight modifier column is highlighted by default and has no effect on this step.

You should now have four transforms and a final transform.  
T3 is linked from T2.  
T4 is linked from T1.

T2 is selected

Transform 2

Triangle | Transform | Colors  
Variations | Variables | Xaos

Path	Weight modifier
to 1	1
to 2	1

Right click in Xaos

- View as "to"
- View as "from"
- Rebuild xaos links

Clear all

Set all

Select "Add linked xform"

Add linked xform

**Step 3**

Adding linked transforms.

### Step 3b (Optional)

If you want to verify that the transforms are linked correctly:

On Xaos tab, with **T3** selected:

Right click anywhere in the Xaos window

Select: View as "from"

"1" appears only in the T2 Weight modifier column, indicating that T3 is linked from T2

Repeat, selecting **T4**

"1" appears only in T1 Weight modifier column, indicating that T4 is linked from T1

T3 is selected

Path	Weight modifier
from 1	0
from 2	1
from 3	0
from 4	0

Right click in Xaos  
Select: View as "from"

T3 linked from T2

### Step 3b

Verifying the linked transforms

### Step 4:

Set the variations and variables for T3 and T4 to:

#### T3:

Linear: 1

#### T4:

Spherical: 0.01, Diamond: 0.03,

Crackle: 0.5

Crackle Variables:

cellsize: 0.25

power: 1

distort: 0

scale: 0.75

z: -0.35

Leave the weight and color settings on both at default.



### Step 4

Your screen should look like this.

**Step 5:**

Go back to **T1**:

Add Crackle: 0.5

Leave variables at default.

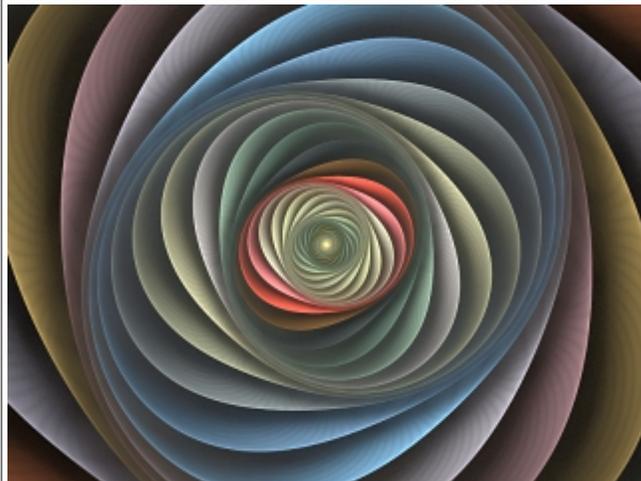


**Step 5**

Your screen should look like this.

**Step 6**

Adjust Master Scale to approximately 55.



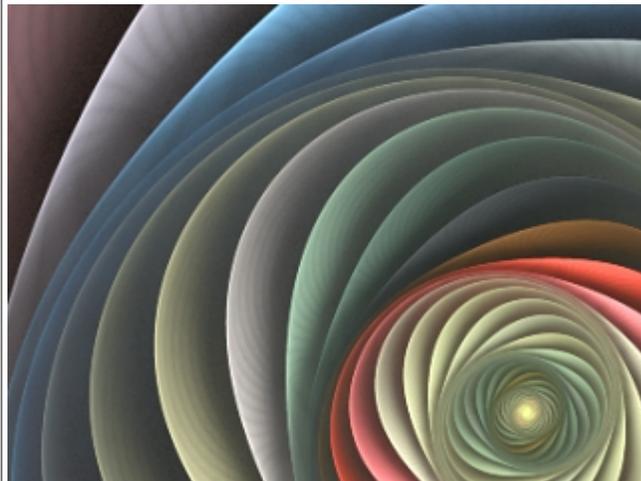
**Step 6** Your screen should look like this.

**Note:**

The texture appears very subtle in the preview, but will show up nicely when rendered.

I use the following settings for a 1024 x 768 image:

Quality: 6000, Filter Radius: 0.6, Oversample: 4



**A closer look**

### **Tweak!**

Changes in the values of linear and spherical in T2 and T3, and moving and/or rotating T2 and T3 will give a variety of designs, as will changing the Julian variables in the fX.

In the example at right, the Julian variables have been changed from Power: -2, Dist: 1, to Power: -5, Dist: 2.

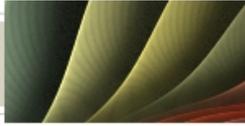
Making these, or similar, changes will result in the texture shifting on the design, but won't affect the texture itself.



**Julian Power -5, Dist 2. Gradient rotated -95.**

Want a different texture? Of course you do. A change in the crackle variables and/or variations on T4 can create an infinite variety of texture patterns.

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## Variations on a Theme

Or variations - and variables - on a theme. Changing the crackle variables can greatly influence the texture, as can using variations other than spherical and diamond.

Here are some examples of textures using Step 6 of the starter flame from the previous page.

### Variable settings 1:

Changing the Crackle variables on **T4** to the settings below results in a large, almost nebulous pattern:

cellsize: 1  
power: 0.5  
distort: 0.25  
scale: 0.5  
z: 0



Changed crackle variables

### Variable settings 2:

Changing the Crackle variables on **T4** to the settings below results in a medium-sized, molecular pattern:

cellsize: 0.6  
power: 0.75  
distort: 1  
scale: 0.25  
z: -0.75

The crackle variables on T1 can be tweaked in the same manner. Keep in mind that though a texture may look messy on the preview, when rendered the details really come out.



Changed crackle variables (2)

### Changing the variations

All of the examples up to this point have been using Spherical 0.01, Diamond 0.03 and Crackle 0.5 on T4. Using variations other than Spherical and Diamond opens another door for experimentation.

Changing the variations, variables and values on T4 to the settings below results in a subtle mesh texture.

**T4:** Spherical: 0, Diamond: 0, Crackle 0.5, Elliptic 0.05  
cellsize: 0.15  
power: 0.5  
distort: 0  
scale: 1  
z: 0



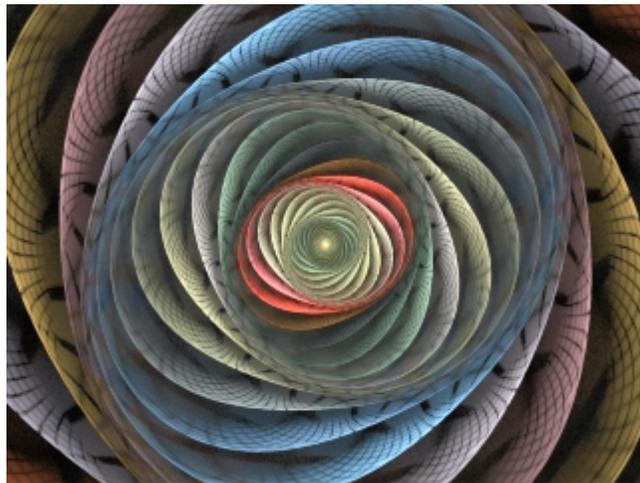
**With elliptic variation**

### Final Tips:

Try substituting different variations for Elliptic. Variations I've used are Bipolar, Borders and Hemisphere, though I'm sure there are many more that will work just as well.

Reducing the variation value results in more subtle textures. Increasing the weight on T4 and moving the transform results in a bolder texture.

Using the variations and variable settings from Step 6 on the previous page, here I've increased the transform weight on T4 from 0.5 to 5 and moved it down 1.



**Not so subtle**

I haven't experimented (yet) with this technique on designs other than the "Blob Spirals" method by Zueuk, but there's a good possibility that it will translate well for some if not many of them.

And that's it! Happy fractalling!



## Resources, Terms of Use, and Acknowledgements

**RESOURCES:** Tutorials, plugins and flame packs.

- The Blob Spirals Tutorial (<http://www.woosie.net/fracfan/viewtopic.php?t=3124>) by Peter "Zueuk" Sdobnov (<http://zueuk.deviantart.com>)
- Explore Variations Using Blur (<http://slobo777.deviantart.com/art/Explore-Variations-Using-Blur-82856526>) tutorial by Neil "slobo777" Slater at deviantART. (<http://slobo777.deviantart.com>)
- The crackle variation plugin (<http://slobo777.deviantart.com/art/Apo-Plugins-Hexes-And-Crackle-99243824>) also by Neil Slater. The plugin may be downloaded from his gallery, and is also available in the Supermassive Plugin Pack (<http://phoenixkeyblack.deviantart.com/art/Supermassive-Plugin-Pack-98807426>) compiled by phoenixkeyblack at deviantART.
- Installing Plugins (<http://cmptrwhz.com/apophysis/plugins.php>) and the Apophysis Help File (<http://cmptrwhz.deviantart.com/art/Apophysis-Help-File-v1-01-105243195>) by Dave "cmptrwhz" Dartt (<http://cmptrwhz.deviantart.com>), at deviantART.
- Apophysis Guide v.2.1 (<http://clairejones.deviantart.com/art/Apophysis-Guide-v-2-1-34031367>), a wonderful tutorial for beginners, by Claire Jones (<http://clairejones.deviantart.com>). Also see Claire's Apophysis Resource Center (<http://apophysis.byethost8.com>) for more excellent tutorials.
- The Fractal-Resources group (<http://fractal-resources.deviantart.com>) at deviantART has archived dozens of starter flame packs generously offered by deviantART members.

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  - Disassemble or extract elements, i.e., images, excerpts of text, .flame file, without permission, and post, display or redistribute them.
  - Modify or alter any element in any way, without permission, other than the parameters in the included .flame file, and post, display or redistribute them.
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  - Redistribute, at no charge, the original .zip file, unaltered, with attribution to Susan Wallace.
  - Use the parameters in the .flame file as a starting point for your own work.
  - **What I hope you'll do**
  - Find this tutorial useful.
  - Tweak relentlessly.
  - Show me what you've done with it by sending me a note at deviantART (<http://skellorg.deviantart.com>) or at [skellorg@gmail.com](mailto:skellorg@gmail.com).
  - Have fun!
-

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**ABOUT:** HTML hand-coded in Word Pad by Susan Wallace; graphics created in Apophysis and PaintShop Pro. Visit Abandon Reason (<http://art.skell.org>) for more information and digital art by Susan Wallace.

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