

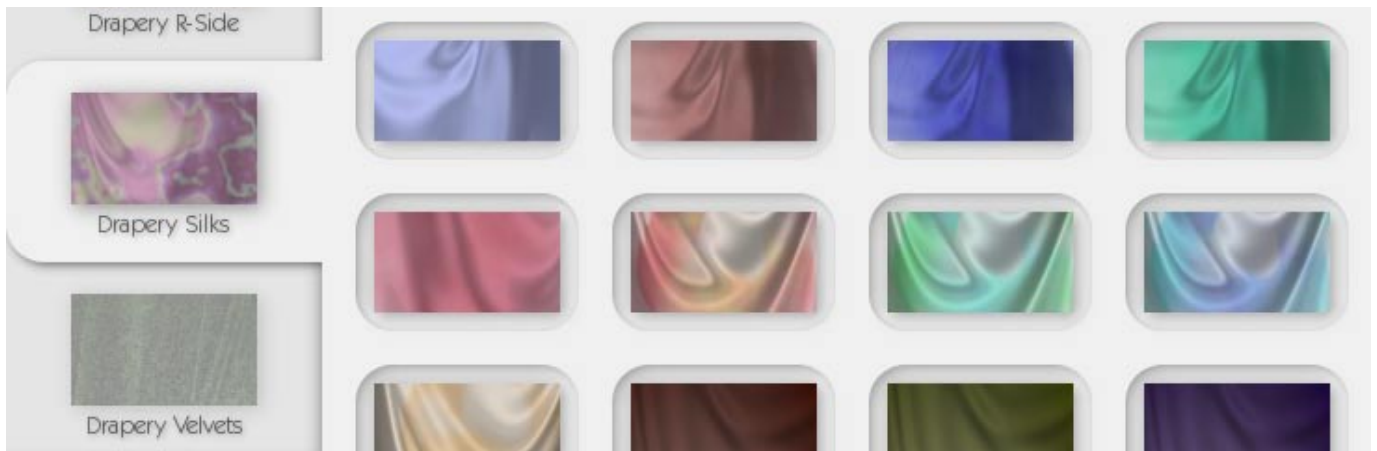


Design your own backgrounds.

## Backdrop Designer manual

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Create beautiful material folds & other patterns in Adobe Photoshop or Elements



[from: Digital Anarchy]  
f/x tools for revolutionaries

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[www.digitalanarchy.com](http://www.digitalanarchy.com)

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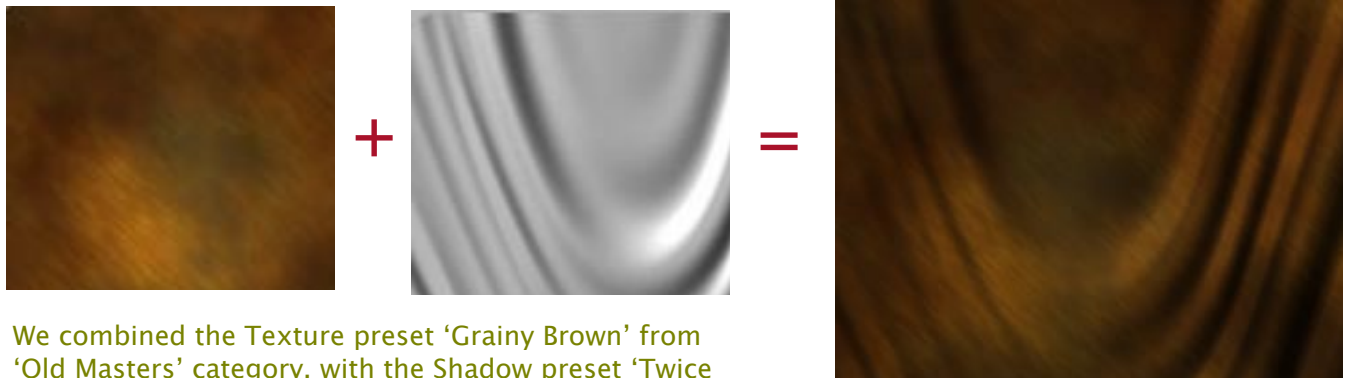
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## Overview of Backdrop Designer

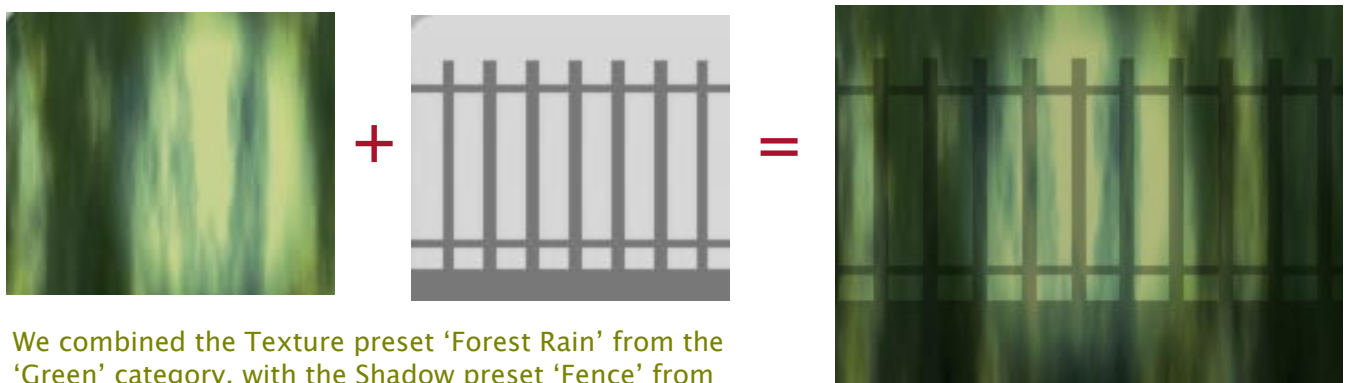
Thanks for purchasing Backdrop Designer! This Photoshop filter is a great new way of creating digital backgrounds for photography and other design mediums.

Backdrop Designer creates digital backdrops similar to the patterns that you find in abstract Muslin backgrounds. By using our Pattern Generation technology, you can use Backdrop to create an almost infinite variation of colors and patterns at any resolution. The Shadow portion of the software allows even more variation by adding in shadows and distortions, like drapery folds.

Backdrop Designer gives you hundreds of preset textures and Shadows to choose from. The presets can be combined or modified to create, literally, thousands of variations. You can even use Photoshop's tools to create more variations. It's a very powerful way of working.



We combined the Texture preset 'Grainy Brown' from 'Old Masters' category, with the Shadow preset 'Twice Hung' from the 'Fabric' category.



We combined the Texture preset 'Forest Rain' from the 'Green' category, with the Shadow preset 'Fence' from the 'Complex' category.



### Works with Primatte Chromakey

Now that so much of the photography process is digital, Backdrop Designer opens the way for new tools that fit into your workflow.

For instance, combine Backdrop with Primatte Chromakey, our masking software. You can photograph your client against a single color screen, typically chromablue or chromagreen. Use Primatte to extract that single color background and get rid of any colorspill along the edges of your subject. Then use Backdrop to quickly create many digital backgrounds.

This process eliminates the need for expensive physical backgrounds. Offer your client a variety of background choices after the photoshoot. Backdrop Designer opens up many creative possibilities, and the flexibility in finding the perfect photograph.

To learn more about Primatte, go to [www.digitalanarchy.com](http://www.digitalanarchy.com). You can try out a free demo and read all of the support material before you purchase.



Photograph your subject against a green or blue backdrop. In Photoshop, use Primatte to remove that green. This leaves a transparent background on your Photoshop layer. Still in Photoshop, use Backdrop Designer to create new backgrounds.



### Support & Requests

We hope that you find Backdrop Designer useful. It is our desire to make sure that you are satisfied with your purchase. If you have any questions or comments, we'd love to hear them. Even if you just want to say hello... send an email to: [info@digitalanarchy.com](mailto:info@digitalanarchy.com).

If there are features you would like to see added to version 2.0 of this product, or a completely different plugin that you're hoping for, definitely send us an email. We are always looking for cool new ideas.

If you have any technical problems or questions related to the filters, please email [sales@digitalanarchy.com](mailto:sales@digitalanarchy.com).

### About This Manual

In writing this manual, we have made two assumptions about who is reading about Backdrop Designer.

### Basic Understanding of Photoshop

We assume that you do have a basic familiarity with Adobe Photoshop and/or Adobe Elements. Photoshop is the standard 'host program' for our plugin. It is the application through which you will most likely access and apply Backdrop Designer.

You do not need to know Photoshop intimately in order to use Backdrop Designer. However, there are concepts in the two software packages that are similar and beneficial for you to understand.

For instance, there are Hue, Saturation, Brightness, Contrast, Opacity, and Blur controls in both Photoshop and Backdrop Designer, though at different access points. The term 'layer' is often used in our explanation of Backdrop; this is a Photoshop term that you really must know.

When an explanation is beyond the scope of this manual, you will want to read additional information in the Photoshop Help menu or the Photoshop manual.

### Learn About Compositing Terms

We assume that you are not familiar with terms that are common to the compositing industry. By 'compositing', we mean the design process of combining multiple images into a single visual.

Compositing is what broadcast designers do when they animate text characters over a moving image. Or what graphic designers do when they overlay graphics to create a new, more complex graphic for a brochure.

Compositing is also what you, a photographer, are doing in Backdrop Designer when you combine a Texture and a Shadow preset. You then create another composite by applying Backdrop to a Photoshop layer, and overlaying the Backdropgraphic with a layer containing your photographed subject.

The relevant terms, like 'noise' and 'bump mapping', are explained as we go through the manual. Have fun!

### Product Registration

Registration occurs when you purchase the filter. We register you in our database using the contact information you supplied upon purchase, and the serial number we've given you.

The Macintosh installer will ask you to fill out a quick, three-question registration box. That's all.

The Windows installer will take you to an online register page. If you do not have internet access, just close the browser window that opens. To finish registration, once you have filled out the form, please close the browser window that was opened.

## About Digital Anarchy

Digital Anarchy is a privately owned company operating out of San Francisco, CA. Digital Anarchy is devoted to creating high end and high quality software products for professional photographers, broadcast designers in television and film, and video editors.

These products solve a wide range of problems that face designers, from creating text effects and background elements to the addition of lighting effects in 2D compositing applications. Digital Anarchy products work in conjunction with a wide range of applications from companies like Adobe, AutoDesk and Apple.

For more information, please go to: [www.digitalanarchy.com](http://www.digitalanarchy.com)

## About Ambient Design

Ambient Design is a New Zealand based software development company specializing in contract work for remote clients. The company was founded on a strong graphical basis after the founders left MetaCreations in January 2000, but has grown since then to encompass Internet development, cross platform development, and a wide range of technologies. Ambient's render engine, Goblin, runs beneath Texture Anarchy.

Ambient was founded with the intention of creating a strong engineering company that would provide an output for some of the talent available in New Zealand. Over the last two years they have worked for a wide range of international companies providing complete engineering services from design to implementation.

For more information, please go to: [www.ambient.gen.nz](http://www.ambient.gen.nz)

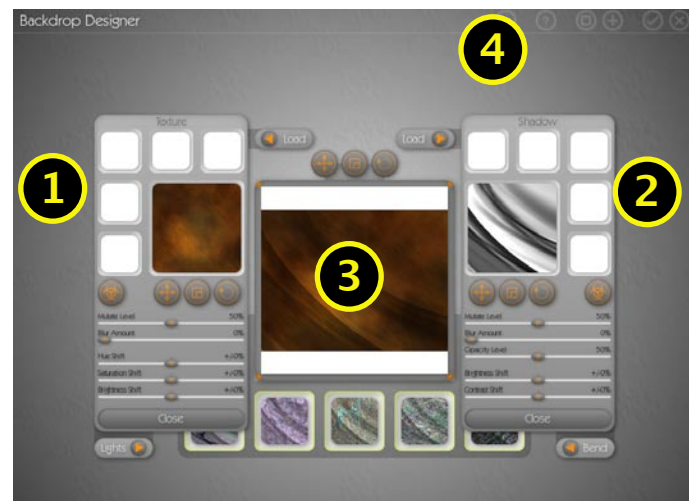
## Interface Overview

Backdrop Designer is accessed through Photoshop's Filter menu, like most plugins. When you select Backdrop Designer, you immediately launch a custom interface. There are lots of funky handles to twirl and cool blinky buttons to push (ok, we're fibbing about the blinky part). Let's discuss what they are.

### Four Main Sections

Basically, the Bacdrop interface has four main areas:

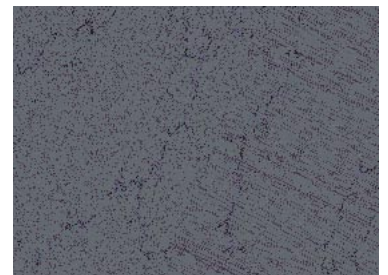
- 1: Texture Window, including the Texture Preset Manager
- 2: Shadow Window, including the Bump Editor and Shadow Preset Manager
- 3: Combined Window
- 4: The Menu Bar, including the main Preset Manager



### Texture Window

The Texture Window allows you to select a color preset and make basic modifications.

The amount of information stored in the texture can vary. The texture may be a flat color; a color with a flat texture; or color with a bumpy texture. This bumpy texture is called a 'bump map'.



Texture without bump map



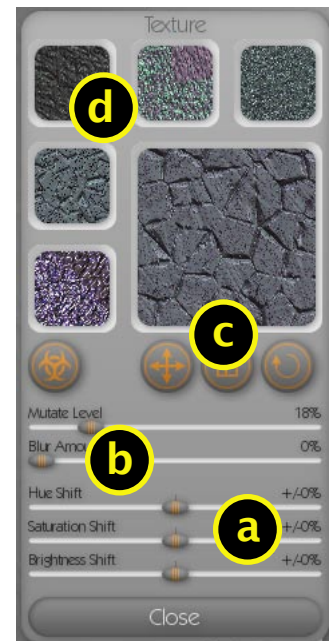
Texture with bump map

### Texture Window Options

Once you have selected a texture preset, there are many ways to change its composition.

- a: Make changes to its color using the Hue, Saturation, and Lightness sliders in the Edit menu.
- b: The Blur slider allows you to soften the texture, making it appear out of focus in the background.
- c: Change the look of the texture by using the Transform tools to move, rotate, or scale the texture.
- d: The Mutation wells give you immediate opportunities to click and change the essential composition of your Texture preset.

The Texture Window, with its dropdown menu of options.



### Shadow Window

The Shadow Window allows you to load in a grayscale image that affects the color texture. We call this window the Shadow 'Map' Window because the shadow acts as a bump 'map' for your texture.

'Bump mapping' refers to a visual distortion that occurs in the compositing of two images.

### What is a Bump Map?

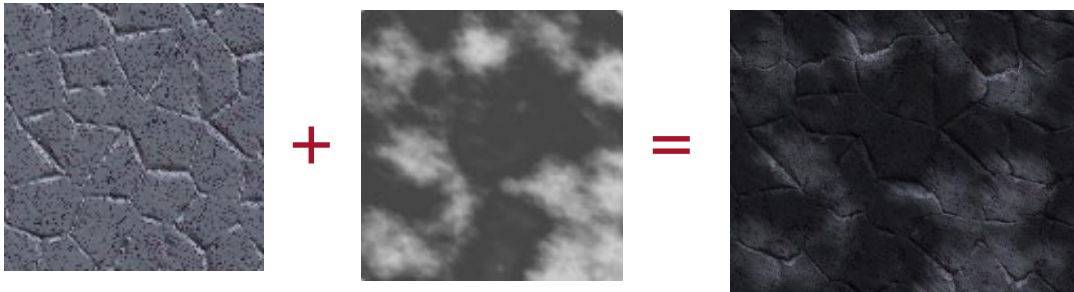
A 'bump map' is a common graphics term for a grayscale image that is used to give another surface the illusion of ridges or bumps. Basically, one image alters the shading of a second image, in order to create the appearance of changes in height on that second image's surface.

This 'fake' appearance of height/depth is based on the brightness values of the first image. White gives the highest height, and black gives the lowest. All values of gray give a range of height in between.

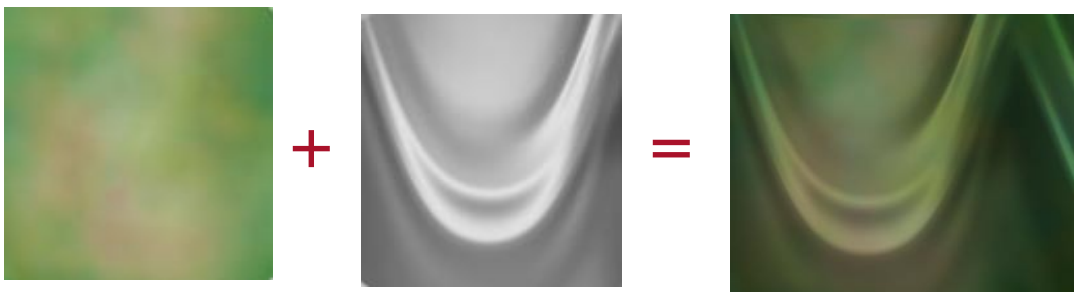
### Two Kinds of Maps

There are two types of Shadows: Regular Shadows and Shadow Distortions.

- Regular Shadows are similar to the appearance of shadows cast by a window or overhang. They are simply projected onto the surface from a virtual light source. The surface of the texture itself is not affected.



- Shadow Distortions are shadows caused by an uneven surface, such as folds in a drape. Visual distortion appears in the texture that the shadow is applied to.



### The Bend Editor

Any grayscale image can be used as either type of Shadow. How much the shadow affects your texture depends on the setting in the Bend Editor.

If Bend is set to 0, then no distortion occurs and the image behaves as a Regular Shadow. Shadows caused by windows or doors would fall in this category.

If Bend is set to something other than 0, some amount of distortion will occur in the texture. The image is now a Shadow Distortion, which adds to the illusion that the texture surface is not flat.

### Shadow Window Options

In addition to the Bend Editor, there are other ways to control and alter the Shadow preset that is loaded in.

- a: The Blur slider softens the Shadow. This option is very important for achieving the look of realistic shadows which are usually not very well defined with soft edges. It can also be important for smoothing sharp lines in a distortion.
- b: Opacity controls how much the Shadow affects the color image's tonal values. The higher this is set, the more shadowing that is added, and the darker the image will get.
- c: The Brightness and Contrast sliders help set the tonal values of the Shadow.
- d: Change the shadow with the Transform tools, which are Move, Rotate and Scale.
- e: The Mutation wells give you immediate opportunities to click and change the essential composition of your Texture preset.

The Shadow Window, with its dropdown menu of options, and the Bend Editor.





### Preview Window

The Preview Window shows the effect of the shadow on the texture you've chosen. If the Texture preset and the Shadow are ingredients, the Preview Window shows what's in your mixing bowl.

When you hit the 'OK' button to apply a backdrop to your Photoshop layer, this is what the final output will look like.

There are Transform tools for the Preview Window. However, any Scale, Position or Rotation will affect both the Texture and Shadow. You are generally better off using the individual Transform tools in the Texture and Shadow windows.



The Combined Window, with global transformation tools.

### Menu Bar

The Menu Bar is a grab-bag of functions. On the right side, you can apply the filter to your Photoshop file, or quit out of the filter without applying its results. In the left corner, there is a Tool Tip prompt that provides info about a function when your mouse rolls over it.

There are three kinds of presets in Backdrop Designer. The Menu Bar gives you access to the main Preset Manager with Load and Save buttons.

You can also set the final Render Quality using a dropdown menu. If you are seeing jagged edges when you render out a texture, you will need to set a higher render quality.

The Menu Bar in all its iconic glory.



## Working With Photoshop

Now that you know the basics of Backdrop Designer, let's discuss some basics of Photoshop. When you are in Backdrop Designer, you're still working within Photoshop. Therefore, the principles of Photoshop for working with pixel-based graphics apply to your Backdrop work. The mechanics of working with filters inside Photoshop are also applicable.

### How Backdrop Affects the Photoshop File

When you apply Backdrop Designer, you are simply adding an image to the selected layer of your Photoshop file. As you already know, the filter opens up a custom interface for you to work within.

Even though you can't see or access Photoshop's palettes or menu, you are working inside Backdrop Designer *INSIDE* of Photoshop. You have not opened another program. You've simply applied a filter that happens to be so cool, so fun, that it requires its own interface!

Once a Backdrop texture is rendered, that imagery becomes part of your Photoshop file. Meaning, you can't double click on the layer to 'reopen' Backdrop Designer and edit that texture further. You can, however, save presets to accomplish the equivalent of this task.

### Photoshop Properties Stay Intact

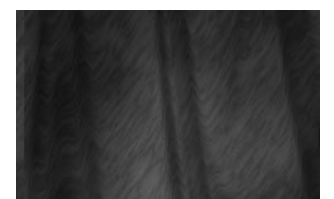
If your file has multiple layers, the layers that weren't designated will stay untouched. All Photoshop related aspects of that layer, and the rest of the file, will stay intact. Any opacity settings, layer masks, layer effects, drawn selections, etc, will be respected and stay as they were.

Backdrop's output is defined by the settings of the Photoshop file itself. For instance, if your Photoshop file is in Grayscale mode, inside of Backdrop Designer you will see only a grayscale version of that texture. The Preset Manager will display color when you load in a preset, but not in the main interface or any rendered image.



The 'Grainy Brown' Texture preset and Soft Folds' Shadow preset, applied to an RGB mode file. (above)

When the same image is applied to a Grayscale mode image, no color is retained. (below)



## Are There Any Limitations?

Not many. You can apply Backdrop Designer to almost any file type (PSD, TIFF, PICT). For bit depth, you can work in 8- or 16-bit.

For Image Modes, you can work in RGB, CMYK, and Grayscale. You can't work in Bitmap, Index, Lab, or Multichannel mode, as is the case with most Photoshop filters.

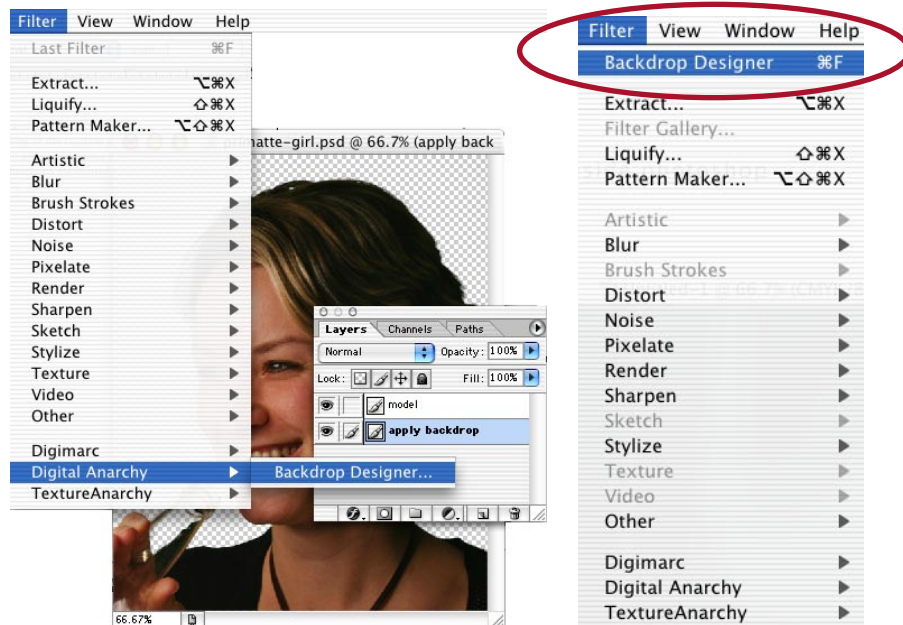
## Commands to Apply Filter

Backdrop Designer is applied (and reapplied) using the standard Photoshop key commands for filters.

In Windows, 'Control-F' applies the last filter. Therefore, this command will auto render the last backdrop created with Backdrop.

'Alt-Control-F' opens the interface of the last filter applied. This means Backdrop will reopen and display your most recent Texture/Shadow combination.

On the Mac, 'Apple-F' applies the last filter/texture. 'Option-Apple-F' opens the interface of the last filter/texture applied.



Choose Backdrop from your Filter drop down menu. (left)  
Once you've applied Backdrop, it will be available through the 'last filter' submenu and keyboard commands. (right)

## Actions and Batch

Backdrop Designer supports using Photoshop actions. You can set up Backdrop Designer within an action or a batch process.

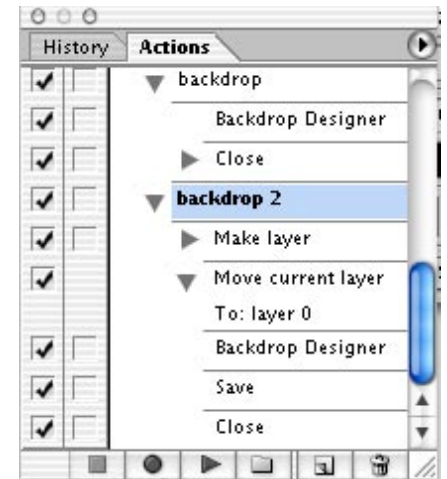
An 'action' is a way to execute a series of commands in Photoshop without clicking the necessary menu items or palette controls each time. The action records parameter settings that you create while in one file, and applies it to another file.

The 'batch' command lets you play an action on a folder of files and subfolders.

You create actions via Photoshop's Actions palette. Tie actions into batch processing through the File> Automate> Batch submenu of Photoshop.

Using either process, you can quickly add a new backdrop to a series of photographs, if you are using the same Backdrop image for all of them. Imagine having 50 photographs of senior prom couples, and applying the same Backdrop Designer graphic behind those couples, simply by setting up the action on one file, then batching it to affect the other 49 files.

We recommend reading more info about using Actions and Batch process in the Photoshop manual or Help menu. They are powerful time-saving functions.



This Photoshop action created a new layer behind the current layer; applied a Backdrop texture; and closed the file. All of this, just by clicking the 'play action' button.

### One Level of Undo

Backdrop Designer supports one level of Undo. There is no Undo button, only the standard keyboard command of Control-Z for Windows, Apple-Z for Macintosh. You CAN toggle the Undo.

Some functions are undoable; others are not. You can undo/redo your last preset load. You can undo/redo a mutation that has been selected.

You cannot undo changes in the Texture/Shadow attributes. If you change the level of Texture Blur or amount of Shadow Bend, you will need to adjust by hand to get back the previous setting.

You cannot undo/redo saving or, more importantly, deleting a preset.

## Can I Import a Texture?

The short answer is: no. Regarding Texture presets, you can NOT import a texture. Or a pattern, or a scanned image of a texture or pattern, or anything else pixel based or vector based or even vegetable based. Well, maybe if it has a spicy flavor...er, nope, no imports.

### Textures Are Fixed Pixels

The reason is simple: These textures are created with mathematical algorithms. Ever hear the term ‘fractals’? That’s what you’re working with, until you hit ‘Apply’ to render the texture into a pixel-based file. That math is why they can extend themselves in an infinite seamless fashion.

More about fractal algorithms in a bit. The bottom line is that you can’t import a pixel-based graphic and turn it into a mathematical formula. A formula needs to generate the graphic from the math.

### You Can Adjust in Photoshop...

You can’t import, but there are other methods to resource a graphic you may have. For instance, there are Blend modes available in the first level that will let your texture interact with the original Photoshop image. These work the same way as Photoshop blending modes. You can also turn off the color channel and just have the bump applied to the original image.

### Shadows Can Be Imported

In the Bend Editor, there is a Load button. This button allows you to bring in a grayscale image that you have created, and use it as a Shadow that displaces the Texture it overlays. Please note that the import does not happen through the Shadow Preset manager or its Load button. This displacement/bump map will give you more control over the simulation of material folds in your Backdrop graphic.

For more info about importing bump maps, see the Bend Editor section of this manual.





## Those Crazy Photoshop Terms

Backdrop Designer creates algorithm based mathematically generated graphics. These are called procedural textures and they are resolution independent. If this subject doesn't interest you... Don't worry. You don't need to understand procedural textures in order to use Backdrop Designer! You can skip this whole manual section.

### Procedural Textures

A 'procedural texture' is a broad topic that relates to computer graphics in general, and moreso to concepts like fractal noise, mathematical expressions, and texture mapping.

Essentially, the beautiful images created by Backdrop Designer are generated by powerful math equations that use randomized pixels to create very organic and naturalistic imagery.

What you will want to notice about the benefits of procedural textures is that they are 'seamless'. The texture repeats itself without showing a noticable gap in the pattern. The seamlessness of procedural textures is what defines some of the great aspects of Backdrop Designer, like its graphics being resolution independent.

We've loaded the preset Cascade from the Fabric Organics category in the Combination Preset Manager. If we use the Move tool to shift around the Texture or Shadow, those images repeat themselves in a random, seamless fashion..



## Resolution Independent

‘Resolution independent’ means that you can apply Backdrop Designer to a file of any pixel resolution. This means Backdrop’s output will take on the physical dimensions and the pixel-based resolution of your image.

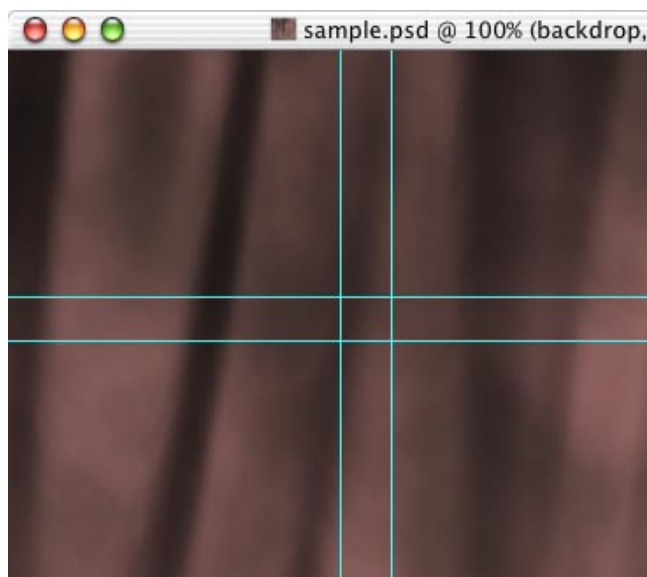
Whether you apply Backdrop to a 4 x 6 inch, 72 ppi file or to a 12 x 20 foot, 300 ppi file, your graphic will look sharp and color perfect.

## Pixel Resolution

‘Pixel resolution’ means the number of pixels per square inch of your file, or PPI. So ‘150 ppi’ means there are 150 colored squares per square inch of your file. And ‘300 ppi’ indicates a higher level of detail, because there are 300 squares of color in every square inch.

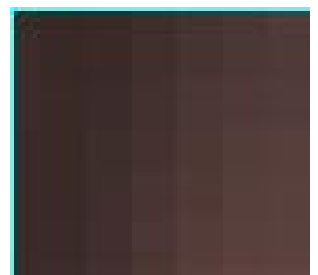
As with any graphic created within Photoshop, the higher the resolution means the more detail that is in your file. This means the visual quality of the rendered Backdrop image will be higher.

Therefore, a Backdrop graphic saved at 300 ppi will look better than the same graphic saved as at 72 ppi.

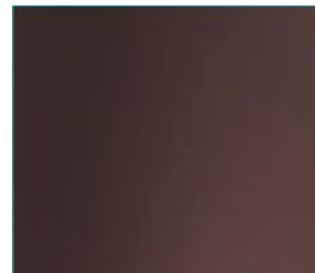


At left, a Backdrop graphic rendered into a Photoshop file. Note the square area delineated by guides.

At right, this area is shown as two samples. The top shows the file at 72 ppi. The bottom is saved at 300 ppi. Notice the banding of the lower resolution sample versus the smoothly gradated tones of the higher rez file.



72 ppi file



300 ppi file



### File Format Does Matter

We also want to point out that the less optimized or compressed your graphic file format is, the higher the quality of the rendered Backdrop.

A TIF file format, for instance, is not a compressed format. Neither is the RAW format that a digital camera may save to; in fact, the RAW format saves a very high level of information. A JPEG or GIF format, which you are likely to encounter if you work with web-based graphics, are compressed and drop out details that you will likely want to preserve.

Therefore, a Backdrop graphic saved as a TIFF will look better than the same graphic saved as a JPEG.

### Work at Your Target Resolution

In conclusion, it is always best to work at a higher resolution; at larger than anticipated physical dimensions; and in a non-compressed file format to create your original Backdrop Designer texture.

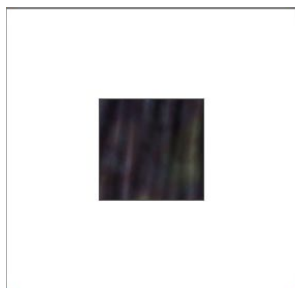
Once in Photoshop, you can always scale down that file and resave. Or, save your Backdrop work as a preset, and reapply to a new, smaller file.

Of course, you can always change the render quality of your Backdrop using our Render menu. Rendering at High Quality will give your graphic smoother tones and edges than rendering at Normal Quality. High Quality, however, will take much longer to render.

Please see the Menu Bar section for more info about render quality.



The drop down  
Render options menu.



Preview of file that is  
100 x 100 pixels



Preview of file that is  
640 x 480 pixels

## Menu Bar

You have been introduced to the basic interface of Backdrop Designer, and you've moved around these areas in the tutorial earlier. The next few sections explore the interface in more depth.

The Menu Bar provides a variety of basic functions. The Apply and Cancel buttons are here. It holds a built-in system which provides tool tips; options for the render quality; and the main Preset controls.



The Menu Bar contains:

- (a) tool tips
- (b) render options
- (c) company info
- (d) preset management controls
- (e) application buttons

## Tool Tip System

The Tool Tip System is not designed to be an all inclusive way of learning Backdrop Designer. It is simply to help you remember what a particular part of the interface does. In some cases, the tool tip is a handy way to remember what options, such as keyboard shortcuts, are available.

As you roll over parts of the interface, the words 'Backdrop Designer' will fade in the upper left corner of the menu bar. They are replaced by the name of the tool you are mousing over and a short description of its functionality.

The default text that appears in the Tool Tip area. (top)

Backdrop Designer

Tip that appears when Mutate Wells are moused over. (middle)

Mutation Target.  
Click to select. Drag pans, +shift scale, +ctrl rotate. Alt-click to lock.

Tip that appears when Add Preset button is moused. (bottom)

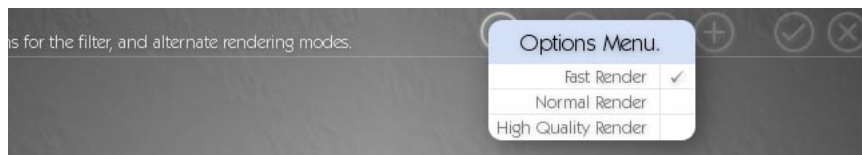
Add Preset  
Click to save the current settings as a preset.

## Render Options (arrow)

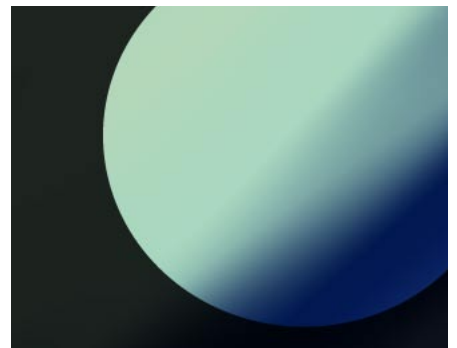
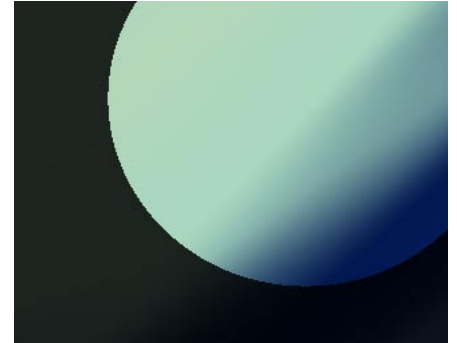
The Options Menu is where you control the quality of textures that get rendered out. Your render choices are Fast, Normal, and High Quality.

Usually Fast Render will be good enough to design your texture. However, Fast Render cuts some corners in order to speed things up. If you run into problems like banding colors or jagged edges (known in cosmopolitan circles as ‘the jaggies’), you will need to increase the render quality.

For final renders, we recommend you use at least Normal Render. High Quality produces great results, so that is the preferable renderer, but it can take a very long time on high resolution images [up to an hour or more for 8 x 11 inches at 300 dpi].



Geek Note: When you increase the render quality of your Backdrop, you are increasing the sampling amount. Each pixel gets a larger sample area, which results in smoother anti-aliasing and more detail.



TOP: Fast Renderer  
BOTTOM: High Quality Renderer

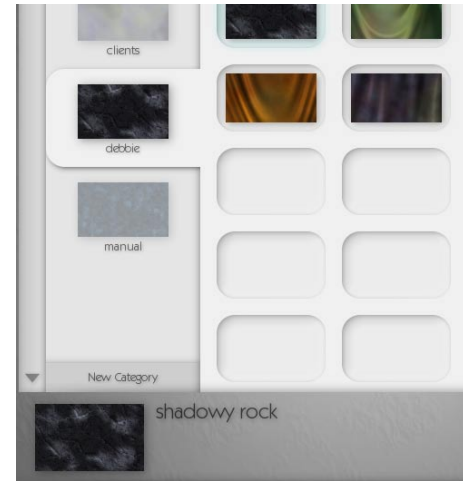
The example above shows the difference in the smoothness of a circle's outline between Fast (top) and High Quality (below). The High Quality version also renders with better colors and less banding.

## Load Preset (square)

The Load Preset button brings up Backdrop Designer's main Preset Manager. Click this button when you want to load in a premade combination of a Texture preset and a Shadow preset.

Backdrop ships with a number of Combination presets that we have already put together for you. You can save your own Combination presets via the Add Preset button, and those presets live here too.

Once inside the Preset Manager, you can choose presets, rename them, or delete them. You can also create new preset categories.



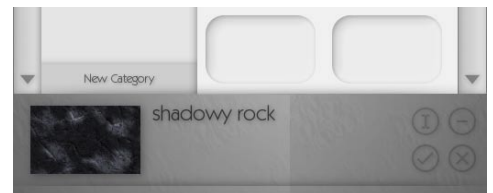
Clicking the Load button opens up the main Preset Manager.

## Add Preset (+)

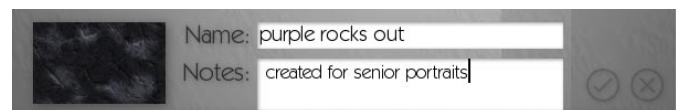
The Plus symbol allows you to save Combination presets of your own. When you have paired a Texture and Shadow that you like, click this button. The main Preset Manager will open, and you'll be able to name and add this preset.

All of the parameters you've customized for the Texture and Shadow – like Opacity and Bend and Blur – will be saved along with the combination.

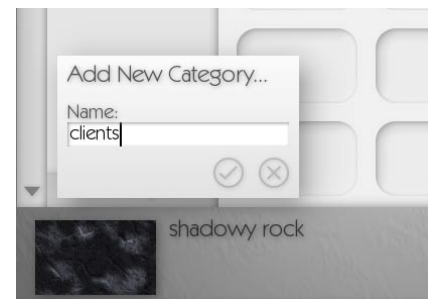
Please check the Preset Management section of this manual for a more detailed explanation of presets.



A thumbnail preview of the preset, with buttons for renaming, deleting, and applying.



You can save a new preset, and even make notations.



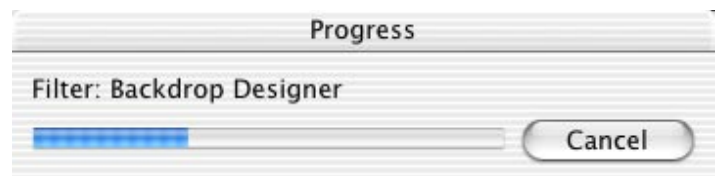
Create new categories to organize your custom presets.

## Apply Button (check)

The checkmark button means 'OK' or "Apply". When you click this, you will render the Texture and Shadow composition into your Photoshop file.

This render may take a few seconds, a few minutes, or even an hour. The factors are the size of the image you're applying it to; the complexity of the texture itself; and the quality set in the Render Options menu. Typically, your render will take between 15 seconds and 2 minutes.

Backdrop will remember the settings of the last Texture/Shadow pairing that you rendered. The next time you launch Backdrop, that same combo will load in as the default.



## Cancel Button (+)

The Cross symbol cancels Backdrop Designer and returns you to Photoshop without rendering. You will not see any new imagery on the layer to which you applied the filter.

Work Note: When you choose Cancel, any parameter changes or preset loads from your work session will be forgotten. Therefore, if you customize a Texture/Shadow, and like the pairing and their attributes but decide not to render, please remember to save your work a new Combination preset.

## About Button (?)

The Question Mark button brings up the About Box, which lists the Digital Anarchists who worked on Backdrop Designer.

## The Presets

Backdrop Designer is all about presets! Presets make your workflow fast, cost effective, and maybe even fun. You have already learned the ‘birds and bees’ of Presets: where they come from, and why the boys are different than girls. In this section, let’s explore how to manage the three types of presets, and where those files are on your hard drive.

Even though Textures, Shadows, and Combinations are accessed separately, their preset management looks and behaves almost the same. Therefore, we will discuss all of the Preset Managers together and make note of any differences in functionality.

## Three Types of Presets

There are three types of presets in Backdrop Designer.

1. Texture Presets allow you to select the texture and color of your Backdrop. These are accessible through the Texture Window.
2. Shadow Presets allow you to select a shadow for your Backdrop. These presets can act as a cast shadow, or be used to simulate material folds or a 3D surface. They are accessible through the Shadow Window.
3. Combination Presets are customized pairs of a Texture and a Shadow. These presets are accessible via the Menu bar, and can be saved by you to the Preset Manager.

## Loading Texture/Shadow Presets

Access to the Texture and Shadow presets work exactly the same. You load either by clicking on the (surprise) Load button next to the appropriate palette area.

The Load button will bring up a corresponding Preset Manager through which you can browse for the Texture or Shadow that fits your project. You can view these presets, rename them, delete them, and load them into Backdrop Designer.



You can NOT add presets to the Texture or Shadow preset managers. There are a few workarounds, which we discuss in the following sections.

### Loading Combination Presets

The Combination presets are accessible through the 'Load Preset' button in the Menu Bar. You also work with Combination presets via the 'Add Preset' button.

The 'Load Preset' button will bring up a corresponding Preset Manager through which you can browse for the texture/shadow combo that fits your project.

The 'Add Preset' button is for adding your own presets. You create presets by pairing together a Texture and a Shadow, then saving them together under a new name.

### Inside the Preset Manager

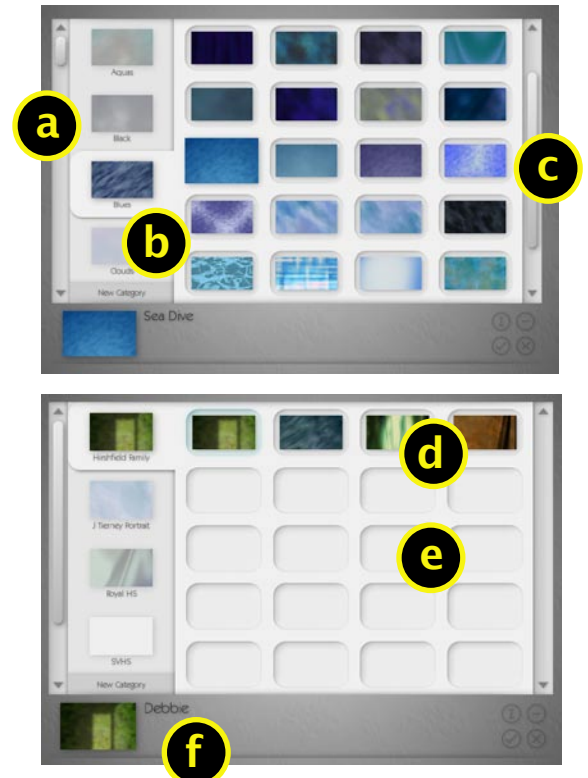
Once you click to load a preset, a new window opens as the Preset Manager dialog box.

Along the left sidebar are the preset categories. Select a category to view its presets. If there are more presets than can fit on the screen, you will see a scrollbar at the right side, indicating that you should scroll down.

The 'Blue' category from the Texture Preset Category. (top) A custom category saved into the Combination Preset Manager. (below)

The anatomy of preset managers:

- (a) Scrollbar for categories.
- (b) Vertical list of categories.
- (c) Scrollbar for thumbnails in category.
- (d) Presets that can be chosen.
- (e) Empty wells for new custom presets.
- (f) Edit area for the highlighted preset.





## Viewing the Presets

In any of the preset managers, you select a preset by clicking on its thumbnail. Once selected, that preset can be deleted, renamed, or selected to use as part of your backdrop.

If you want to take a closer look at any preset, roll over its thumbnail with your mouse. This will create a slightly expanded view of that preset.



Our cursor is rolled over the left-side preset, which has expanded slightly.



When the preset is selected it will look slightly highlighted, like the middle preset.

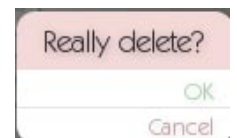
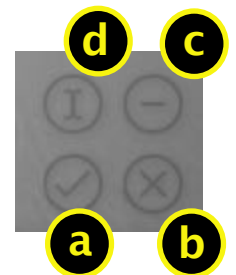


Another thumbnail will display, with its name, at the bottom of the Preset Manager.

## Managing the Presets

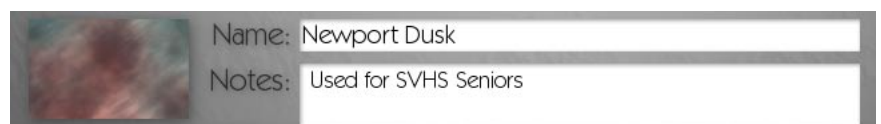
Here is what you can with the selected preset:

- Click the 'OK' button (the check symbol) to select the texture to be part of your backdrop. Alternately, you can double click on its thumbnail. In either case, you'll return to the main interface.
- Click the 'Cancel' button (the X symbol) to get out of the preset manager without making any changes or loading in a preset.
- Click the 'Delete' button (the minus symbol) to delete the texture forever... or at least until you reinstall the software. If you reinstall, the presets that shipped WILL come back, but your custom saved presets will NOT [more on this shortly].
- Click the 'Edit' button (the i-beam symbol) to name or rename the preset, and add a comment or note. At the bottom of the screen, two editable text fields will activate.



The universal 'are you sure?' dialog box.

The editable fields for giving presets names and notes. Here at Digital Anarchy, we feel this is the best part of creating textures!



## Bully Your Texture/Shadow Presets

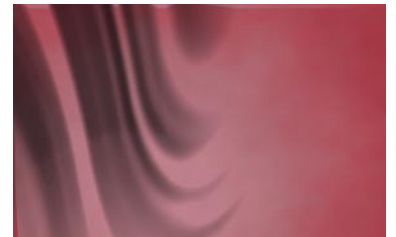
As mentioned earlier, you can't save Texture or Shadow presets. There are some workarounds to this limitation, as explained below.

You can, of course, delete the presets that you don't like or need, which makes the categories less cluttered.

## Make Small Changes

You can also easily manipulate the presets by simply changing their colors, or making other small tweaks. Many presets will look great with a different color palette, even if the original ones aren't to your fancy.

We could have quadrupled the number of shipped presets by saving out one preset multiple times in varying colors. Instead, we created a variety of unique Backdrops, for which you can select the attributes you need.



The 'Prom' preset, with a few changes to Hue, Saturation, Brightness, and Rotation.

## Fool the Preset Manager

Finally, you can get around the limitations of preset management by saving a Texture or Shadow as a Combination preset.

Let's say you want to save a Texture but not a Shadow. Just set your Shadow to Opacity of 0%, then click the 'Add Preset' button in the Menu Bar.

When you reload the preset, you can keep the Texture (which you wanted to preserve) and change the Shadow.



Turn off Shadow preset by setting Opacity to 0.



## Saving a Combination Preset

You can save your own Texture/Shadow creations with the 'Add Preset' button in the Menu Bar. This is a pretty cool feature that lets you take advantage of the presets that are shipped, put a little time into making them perfect, and save them for future projects.

When you click on the 'Add Preset' button, the Combination Preset Manager opens up with a new entry activated. Enter a name for the preset, and add comments.

Once you click the 'OK' button, the preset will be saved into the selected category.

## Create New Categories

You can select the category for your new preset to be saved in. If there aren't any appropriate categories or if you simply want to add one, click on the 'New Category' button.

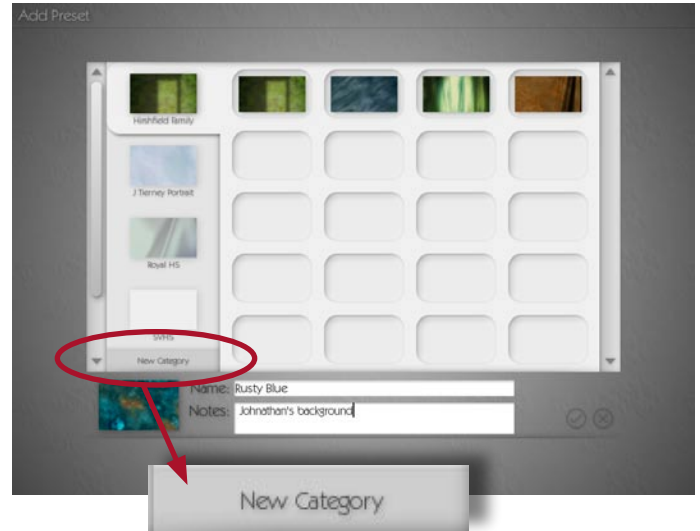
A dialog box will ask you to name the category. Click 'OK', then select a category at left to target your preset.

## Organize Your Presets

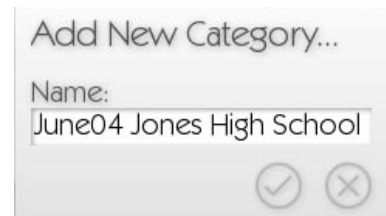
Categories are a great way to organize your use of Backdrop Designer for multiple, ongoing, and reoccurring projects. For instance, if you do a lot of senior photography, you may want to create a category for each high school that you visit. If you operate a quick-photo kiosk in a mall, create categories for seasons or holidays or special events.

Each category gets saved as a .PRS file in your Photoshop/Plugins directory. It is a good idea to backup your custom Backdrop Designer files in case of a hard drive crash.

See the following section about preset files for some guidelines regarding category names and file management.



Click on the 'New Category' button (above) to open that dialog box (below).



### Combine Categories

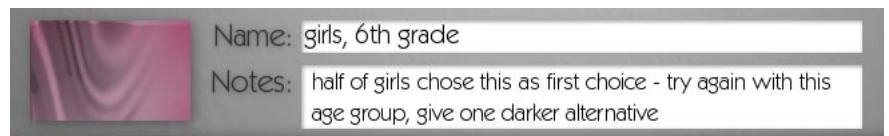
You can't combine custom Combo categories (say that 3 times fast) without doing a simple workaround: Load in a preset from one category, then resave that preset into a new category.

Do this for all of the other presets that you want together, until you've filled the desirable category. There is no way to combine categories otherwise.

### Save Project Notes

Adding notes with new presets will help you to remember the ones you have used successfully. They will also help you to avoid using the same one too much.

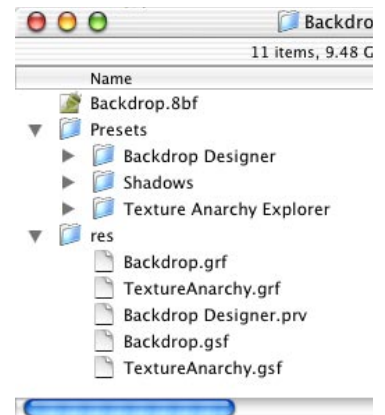
Using notes, along with categories, will help you to group together textures used for a particular project.



### Where Do Presets Live?

The presets live on your hard drive as .PRS files (PRS = PReSets). Each .PRS file corresponds to a preset category. Here's the scoop on managing your .PRS files:

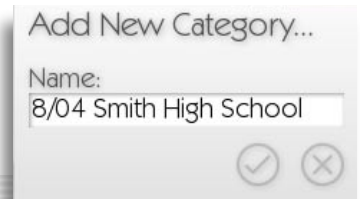
- If you reinstall the software, the presets that shipped with Backdrop Designer will be installed. Any customization that you did to the presets will be lost.
- You should back up your custom presets by copying the .PRS files to a disk that is not your hard drive. Find them at this path: **Adobe Photoshop/Plugins/Backdrop Designer/Presets/Backdrop Designer**.
- You can rename the .PRS files, and those changes will reflect in the names of the categories in the Preset Manager. This will not affect the names of presets.



These are the files/folders installed for Backdrop Designer. The 'Presets' folder holds your presets (imagine that!).

- Because category names are translated into .PRS file names, you do need to follow standard naming conventions. Backdrop Designer will not let you use illegal characters like / a slash in your category names.
- There are no naming conventions for presets. Call them whatever you like, as those names do not leave the Preset Manager.

An error message will occur when you try to use a slash character in your category name.



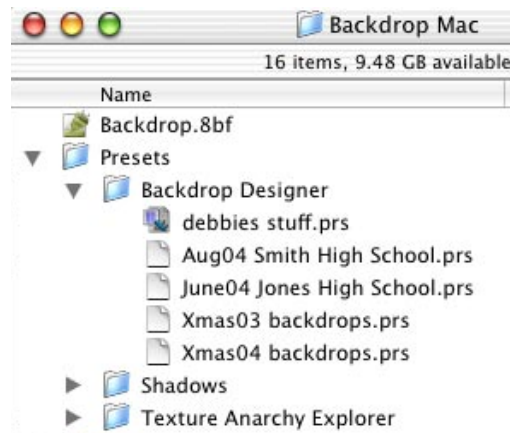
### Error.

Bad parameter has been passed.  
Illegal reference passed to gCfRelative.

The 'Backdrop Designer' folder holds your custom presets. The 'Shadows' folder holds Shadow presets. The 'Texture Anarchy Explorer' folder holds Texture presets.

The preset file names on your hard drive (left) are what display as category names in the Preset Manager in the plugin (right).

Shown here as Macintosh files, but the organization is the same on Windows.



## Where Do Presets Come From?

You create Combination presets by choosing (and typically modifying) a Texture and a Shadow preset. But there are no functions in Backdrop Designer to actually create the Textures and Shadows. So where do they come from?

Why, a stork, of course! Otherwise... we make them with Texture Anarchy. This is a Photoshop filter set that we released in August 2003, which is a deeper way of working with algorithm-generated procedural patterns. There are three Texture Anarchy filters, and the one we use for Backdrop Designer presets is called Texture Anarchy Explorer.



### Overview of Texture Anarchy

Like Backdrop Designer, Texture Anarchy is a procedural texture generator. Procedurally generated textures are a diverse topic, but they can be 2D or 3D, and are commonly used to simulate naturalistic effects such as fire, smoke, water, clouds, and marble.

Backdrop Designer was created for the photographer who wants to jump in and create something in five minutes. Texture Anarchy is a similar product, but it's designed to be more experimental. It's a plugin set for artists who have a little time to mess around with fractal noise, blend modes, and channel mixers.

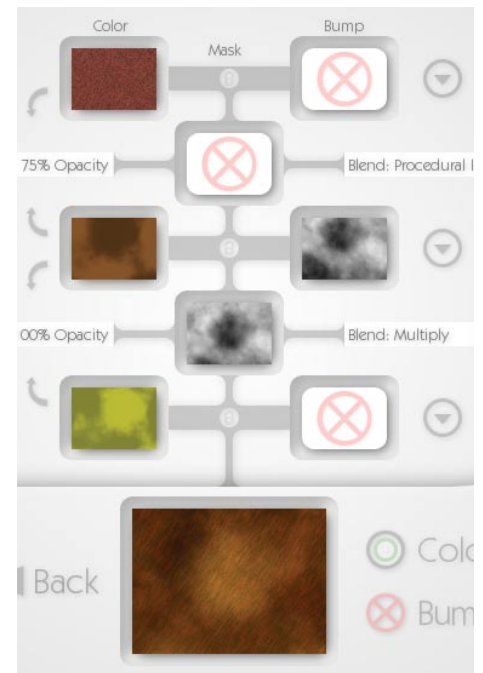
### Textures are Procedural & Fractal

Procedural textures are based on 'fractal noise'. Fractal noise is the method of using grayscale values and random placement to create imagery that cannot be described using simple geometric shapes. With fractal noise, you can simulate natural objects like clouds, lava, water, caustics, and gas. Notice a theme here? Some of Photoshop's built-in filters, like Filter> Render> Clouds, use fractal noise.

A fractal algorithm, by definition, is a repeating pattern that is math-based and can go on endlessly. Sometimes the fractal creates a pattern. That pattern can be random. Other times it repeats itself, but not exactly in the same way, and that is how Texture Anarchy Explorer works.

You will notice that many of the Texture and Shadow presets in Backdrop Designer are organic or naturalistic looking. This is because, at their core, we have used fractal noise and algorithms.

If you are inspired to create new Texture or Shadow presets on your own, please check out [www.digitalanarchy.com](http://www.digitalanarchy.com) for more info and a free demo of Texture Anarchy plugins.



A screenshot from the Texture Anarchy Explorer interface. These are the colors and patterns used to create the Texture preset 'Grainy Brown' in the Old Masters category of Backdrop Designer.

If you are familiar with Photoshop terms like 'layer mode' and 'mask', you can see that we are, essentially, blending together multiple layers of fractal noise.

## Texture Window

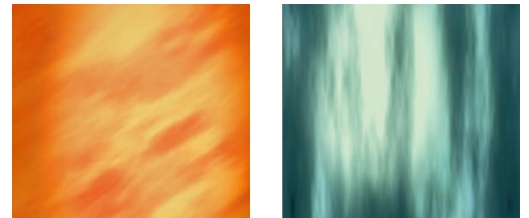
The Texture Window allows you to select from hundreds of ready made presets. If you are interested in creating your own textures from scratch, you can do so with our Texture Anarchy plugin. However, the presets cover a wide range of looks and color palettes. Attributes of the textures may be changed to create literally thousands of other variations.

### Overview of Textures

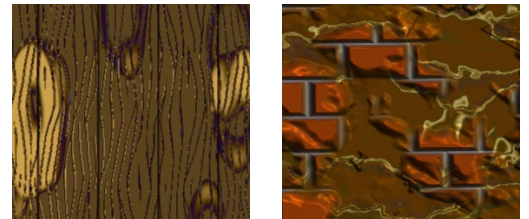
Most Textures only provide color information, and need a Shadow preset to give the texture a sense of depth. But many Textures also have a bump map associated with them.

This internal bump map is usually used to create 'rock' or 'metal' type textures. The bump map is sort of a built-in Shadow, which is a successful look when you want the texture to appear to have a rough or uneven surface.

Of course, by using the Shadow with these already bump mapped textures, you can create even MORE complex backgrounds.



Two flat color Textures that do not have an internal bump map. The categories/presets are Orange/'Fiery Portal' and Aqua/'Moonlit Waterfall'.

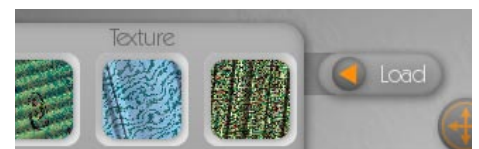


Two Textures with a pre-applied bump map. The categories/presets are Wood/'Rough Oak' and Stone/'Muddy Brick'.

### Load Button

The 'Load' button allows you to access the Texture Preset Manager, where all the Texture presets live. This is generally going to be your starting point, as you will want to find a texture and color that will suit your photograph.

Backdrop Designer will remember the last texture that you used, so if you're applying different effects to the same texture, you won't need to constantly reselect that preset.



The Load button of the Texture Window.

See the 'Preset Management' section for more info about Texture presets.



## Transform Tools

If you click on the Edit button to open the attributes menu, you will see that you have buttons for moving, rotating, and scaling. To use any of the Transform tools, click and manipulate while still hovered over the tool. The preview window will update to your changes.

### Position Tool



The Position tool allows you to move the Texture preview around. This is important if you're not quite happy with where an element of the pattern is located. You can simply scoot the Texture left or right, up or down.

In fact, you don't even need to use the Position button to move a Texture. Just click and drag in the window to pan.

The textures are infinite in size [remember our discussion about procedural textures and resolution independence?]. If you like the Texture overall but you're not crazy about its exact look, just drag around to see other portions of the repeating but ever-varying pattern.

### Rotation Tool



The Rotation Tool rotates (surprise!) your Texture preview. Very useful if you like a particular Texture but need it to match the direction of an element in your photograph, or if you are trying to create a specific effect.

### Scale Tool



The Scale Tool can completely change the look of your Texture, which can have dramatically different looks at different scales.



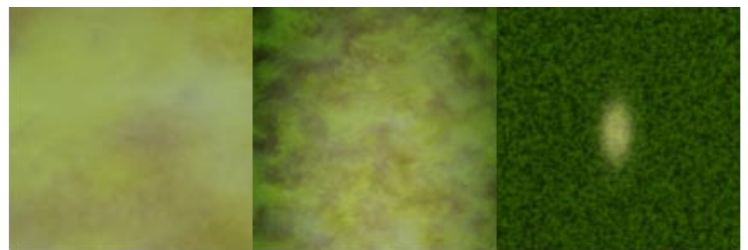
The Transform tools

(a) Position tool

(b) Scale tool

(c) Rotate tool

The category/preset  
Green/'In the Forest'  
at different scales.



Scaled up

Default size

Scaled down

A Texture may look like big, beautiful clouds when scaled up/zoomed in, but will look like TV snow when scaled down/zoomed out far enough.

We highly recommend that you experiment with some of the different presets to see what they look like scaled up and down. Understanding how easily different looks can be achieved with the same preset will come in handy when you evaluate whether a particular preset will work for your project. In fact, you may wind up saving new custom presets because of the variety in imagery that results.

Please read the 'Understanding Textures' section of this manual to read an explanation of why textures can look dramatically different at different scales.

### Mutation Controls

The squares around the Texture Window (and other windows) are called Mutation Wells. They are automatically generated variations of the Texture preset you have loaded.

These mutations are very random, and at their default settings don't always produce usable results. However, by paying attention to the mutation controls available, you can change this ratio. These controls are Mutate Level and the Mutate Options box.

### How to Mutate

To generate mutations, simply click (don't drag) inside the main preview well of the Texture Window. The Mutate Wells will change with each click.

If you click inside a Mutate Well, that mutation will load into the Texture Window preview (and also display in the Preview Window). If you click and load accidentally, don't despair. Backdrop Designer recognizes one level of Undo, and that mistake is undoable. To use Undo, hit Control-Z on Windows [Apple-Z on Mac].



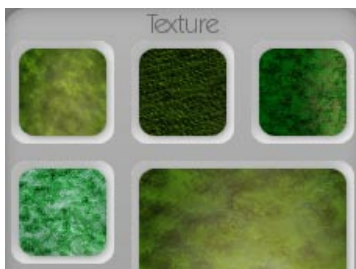
Ways to control Mutation:  
(a) Click in preview well  
(b) Use the Mutate Options  
(c) Slide the Mutation Level

## Mutate Level

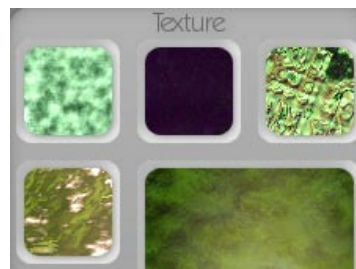
Mutate Level causes the different attributes of the Texture to change randomly. These attributes include color, scale, rotation, and pattern type. The higher you set Mutate Level, the more variation that will result, and the more the mutations will look different than your original Texture.

If you keep the Mutate Level to a low amount, like 10% or lower, it tends to produce results that are very similar to the original. These variations are quite often usable and may give you the tweak you were looking for.

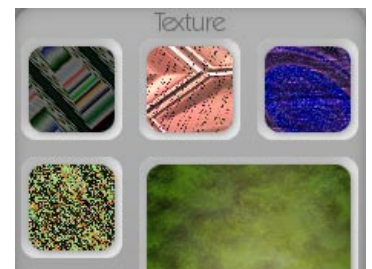
As the Mutate Level increases, so does the randomness of the mutations.



Mutate Level 0



Mutate Level 50



Mutate Level 100

## Mutation Options Box

The Mutation Options box sets which attributes of the Texture change when you click on the main Texture preview well. To access the Mutation Options, click on the funky button to the left of the Transform tools.

Inside the Mutation menu, check on/off which attributes you want activated when you mutate. Hit 'OK' when you are done, or hit 'Cancel' to close the menu without changes.

The textures that Backdrop Designer generates are composed of several different attributes. The best options to experiment with are:

- Color, Gradient: refer to the tones and hues of the texture.
- Noises: refers to fractal noise, the basic underlying patterns.
- Scale, Panning and Rotation: these refer to any transformation.

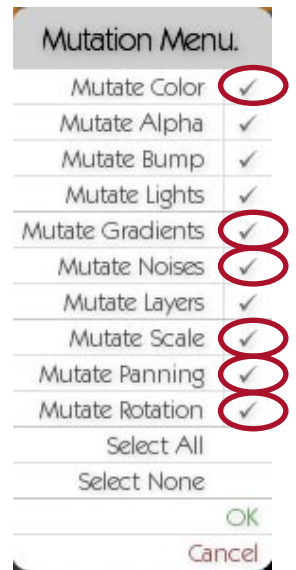
Limiting the number of options that are turned on will keep the mutations less chaotic and much closer to your original Texture.

The Mutation section of this manual gives more details about working with mutations.

## Hang Out with Mutants!

Otherwise, the Mutations exist more to encourage some experimentation, than as a practical tool. Setting it to high amounts can allow the creation of new backdrops that you (or we) may not have imagined. Those experiments can be saved as presets for use and refinement later on.

To save a mutation, click the 'Add Preset' button in the Menu Bar to bring up the Combination Preset Manager. Using the Mutation Wells with the Preset Manager can build up a library of your own unique textures.



## Blur Slider

The Blur slider does exactly what its name implies: it blurs out the selected texture.

Many of the Textures have well defined patterns which may be a bit too sharp for a background. Blurring can make the Texture appear out of focus and more 'in the background' of your photograph. This is important for creating depth of field where there really is none.

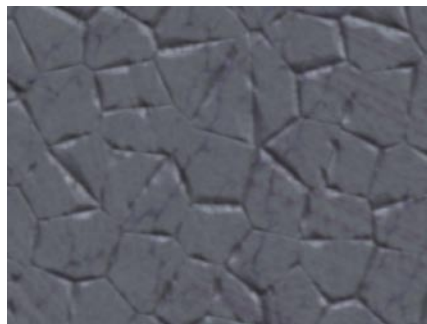
In addition, Blur set to a high value can create a new Texture that is very different from the original in subtle ways.

The Mutate Options circled above are the best ones to experiment with.

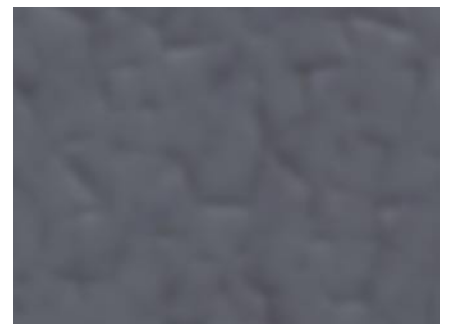
Without Blur, this Earth/'Vordoni Plates' preset is a sharply defined, rock-like image. As Blur increases, the Texture appears out of focus, but still recognizable as rock-like. At a high blur, it becomes a pillowy, gray pattern.



No Blur



Blur of 50



Blur of 90

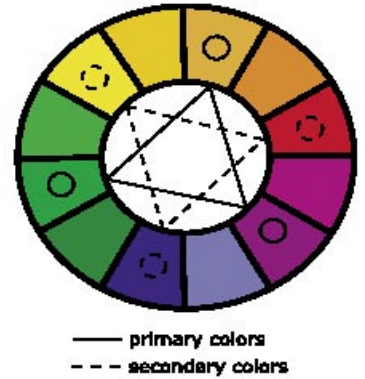
## Hue Slider

Hue causes the Texture to shift its colors.

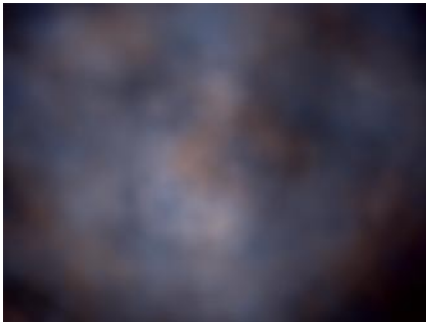
As Hue moves, the colors in your Texture will shift along the traditional color wheel. This is great for textures that are tones of a single color, as you can easily change them to a different base palette.

There is no way to shift a single color; you can only shift around the overall color palette. For textures that are multi-colored, since all the colors shift, you end up with new sets of colors.

Examples of Hue shift with the preset Multi-Color/‘Masterpiece Dream’. With Texture Anarchy [a separate product mentioned earlier in this manual] you can change specific colors in the Texture, using deeper color gradient controls and a multi-light source Lighting Editor.



The artist's Red-Yellow-Green color wheel, off which all color palettes are formed.



Hue at 0 (normal)



Hue at 50 (higher)



Hue at -30 (lower)

## Saturation Slider

Saturation increases the intensity of the colors in a Texture. Like Hue, this affects all colors in the image.

Moving the Saturation slider to its maximum amount will result in bright, neon colors. Setting this value to 0 will remove all color, resulting in a grayscale image.



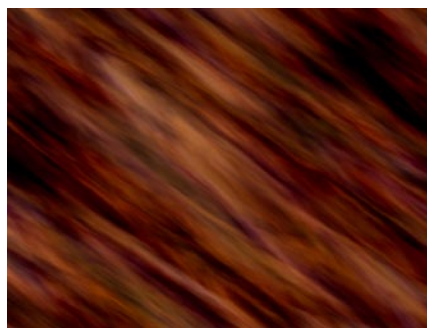
This grayscale ability can be very useful for a variety of reasons:

1. This allows you to create gray-toned images, for use with Photoshop effects like Duotone, or the Displacement Map filter.
2. By removing all color, you can clearly see the amount of contrast in your backdrop, for artistic evaluation.
3. These backgrounds are great for black/white photography.

Examples of Saturation shift with the preset Multi-Color/'Icely Wood'.



Saturation at 0 (minimum)



Saturation at 50 (normal)



Saturation at 100 (maximum)

## Brightness Slider

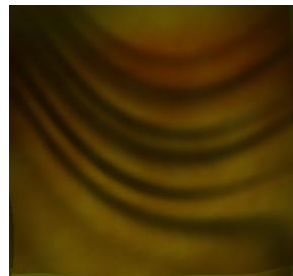
Brightness controls how light or dark a Texture is. Setting to -100 will give you a black texture. Setting to 100 will give you white.

Often when you adjust the Brightness of a Texture, you will need to adjust Brightness for the Shadow its working with, or vice versa. To create deep material folds, for instance, you may increase the Texture Brightness while decreasing the Shadow Brightness.

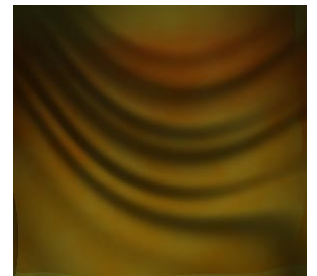
We increased the Texture Brightness to compensate for an overall darkening of the Shadow. The Combination preset is 'Gold Moon Has Risen'.



Texture Brightness 0  
Shadow Brightness 0



Texture Brightness 0  
Shadow Brightness -24



Texture Brightness 18  
Shadow Brightness -24



### Turn off the Texture

If you move the Brightness slider to 100%, the Texture will turn white and disappear. You will see only the Shadow.

This functionality is because of the way that Textures and Shadows combine. When an area of Texture is pure white, it acts as an opaque layer and hides itself beneath the Shadow. It all goes back to bump maps and fractal noise (remember those terms?).

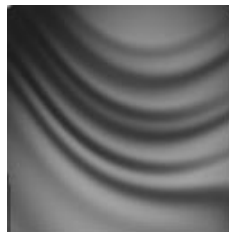
This allows you to render out just the Shadow if you so choose, or to save the Shadow only as a Combination preset.



Brightness at 50 (left), and results (right)



Brightness at -65 (left), and results (right)



Brightness at 100 (left), the result (middle), and the Shadow (right)

Examples of Brightness using the preset Yellow/'Yellow Haze'. Increasing Brightness to its maximum of 100 hides the Texture, and allows the paired Shadow to fully reveal.

## Shadow Window

The Shadow Window allows you to select from a wide range of looks and styles, with attributes that can be changes to create thousands of other variations. These presets are used to create the effect of a shadow being cast, or to simulate a three-dimensional surface.

To create the look of an uneven 3D surface, you will add the Bend Editor, which uses the Shadow to distort a Texture. Additionally, the Shadow will overlay the Texture, providing dark and light areas to go along with the appearance of distortion.

### Manual Note

The Shadow presets are, in essence, textures without color. This manual will sometimes refer to them as textures. Please note that if the word ‘texture’ is NOT capitalized, we are referring to the pattern in a shadow. If the word ‘texture’ IS capitalized, we are referring to Texture presets.

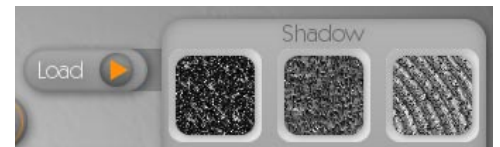
Once again, it is important to read the ‘Understanding Textures’ section of this manual. Shadows are prone to looking very different when you move/scale them, and we explain why this happens.

### LOAD Button

The ‘Load’ button gives you to access the Shadow Preset Manager, where all the Shadow presets live. This will generally be your second stop (assuming that you choose a Texture first), as you will want to find a Shadow will suit your photograph.

Backdrop Designer will remember the last Shadow that you used, so if you’re applying different effects to the same texture, you won’t need to constantly reselect that preset.

See the ‘Preset Management’ section for more info about Shadow presets.



The Load button of the Shadow Window.

## Transform Tools

If you click on the Edit button to open the attributes menu, you will see that you have buttons for moving, rotating, and scaling. To use any of the Transform tools, click and manipulate while still hovered over the tool. The preview window will update to your changes.

### Position Tool



The Position tool allows you to move the Shadow preview around. If you are not quite happy with where an element of the pattern is located, just scoot the Shadow left, right, up, or down.

In fact, you don't even need to use the Position button to move a Shadow. Instead, click and drag in the window to pan.

These textures are infinite in size [remember our discussion about procedural textures and resolution independence?]. If you like the Shadow overall but don't care for its exact look, just drag around to see other parts of its repeating, variable pattern.

### Rotation Tool



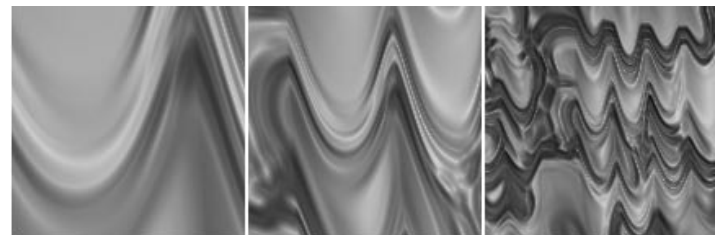
As in the Texture Window, the Rotation Tool rotates your Shadow preview. Very useful if you like a particular Shadow but need it to match the direction of an element in your photograph, or if you are trying to create a specific effect.

### Scale Tool



The Scale Tool can completely change the look of your Shadow, which can have dramatically different looks at different scales.

A Shadow may look like wide open drapes when scaled up/zoomed in. It could look like a bunch of straight lines, however, when scaled down/zoomed out far enough.



Scaled up

Default size

Scaled down



The Transform tools:

- (a) Position tool
- (b) Scale tool
- (c) Rotate tool

The category/preset  
Fabric/'Drooping Sheets'  
at different scales.

We highly recommend that you experiment with some of the different presets to see what they look like scaled up and down. Understanding how easily different looks can be achieved with the same preset will come in handy when you evaluate whether a particular preset will work for your project. In fact, you may wind up saving new custom presets because of the variety in imagery that results.

Ok, we'll only say this one more time! The 'Understanding Textures' section will help explain why you can achieve such different looks just by moving and scaling.

## Mutation Controls

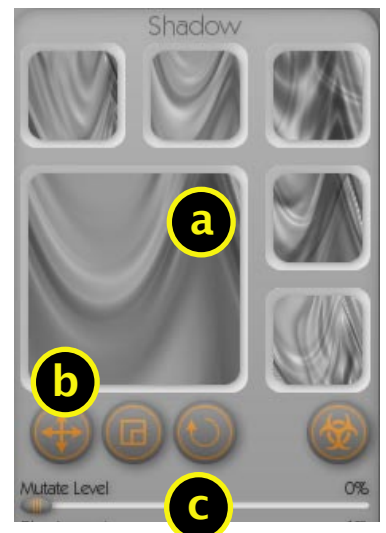
The squares around the Shadow Window (and other windows) are called Mutation Wells. They are automatically generated variations of the Shadow preset you have loaded.

These mutations are very random, and at their default settings don't always produce usable results. However, by paying attention to the mutation controls available, you can change this ratio. These controls are Mutate Level and the Mutate Options box.

### How to Mutate

To generate mutations, simply click (don't drag) inside the main preview well of the Shadow Window. The Mutate Wells will change with each click.

If you click inside a Mutate Well, that mutation will load into the Shadow Window preview (and also display in the Preview Window). If you click and load accidentally, don't despair. Backdrop Designer recognizes one level of Undo, and that mistake is undoable. To use Undo, hit Control-Z on Windows [Apple-Z on Mac].



Ways to control Mutation:

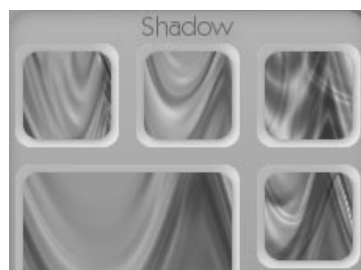
- (a) Click in preview well
- (b) Use the Mutate Options
- (c) Slide the Mutation Level

## Mutate Level

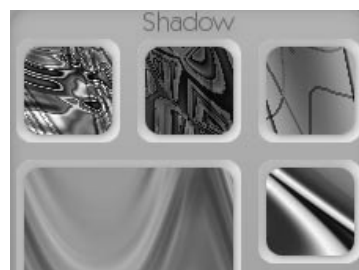
Mutate Level causes the different attributes of the Shadow to change randomly. These attributes include color, scale, rotation, and pattern type. The higher you set Mutate Level, the more variation that will result, and the more the mutations will look different than your original Shadow.

If you keep the Mutate Level to a low amount, like 10% or lower, it tends to produce results that are very similar to the original. These variations are quite often usable and may give you the tweak you were looking for.

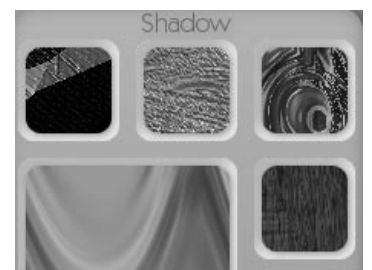
As the Mutate Level increases, so does the randomness of the mutations.



Mutate Level 0



Mutate Level 50



Mutate Level 100

## Mutate Options Box

The Mutate Options box sets which attributes of the Shadow change when you click on the main Texture preview well. To access the Mutation Options, click on the funky button to the left of the Transform tools.

Inside the Mutation menu, check on/off which attributes you want activated when you mutate. Hit 'OK' when you are done, or hit 'Cancel' to close the menu without changes.

Shadow mutations tend to be a bit less random than their Texture counterparts. This is primarily because they are only rendered in grayscale, and therefore don't make use of colors.

Some Mutation Menu options, like turning off the Gradient or Color option, aren't very effective. Otherwise they work pretty much the same as Texture mutations. Experiment in particular turning on/off the Noises, Scale, Panning, and Rotation attributes.

Limiting the number of options that are turned on will keep the mutations less chaotic and much closer to your original Shadow.

## Hang Out with Mutants!

As with the Texture mutations, the Shadow mutations exist more to encourage some experimentation, than as a practical tool. Setting Mutate Level to high amounts can result in the creation of new backdrops that you (or we) may not have imagined. Those experiments can be saved as presets for use and refinement later on.

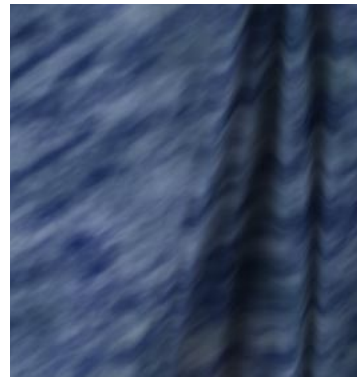
To save a mutation, click the 'Add Preset' button in the Menu Bar to bring up the Combination Preset Manager. Using the Mutation Wells with the Preset Manager can build up a library of your own unique textures.

## Blur Slider

This slider blurs out the Shadow you've loaded. Blur has two uses.

### Create a Soft Edge

Blur allows you to give a soft edge to a Shadow. This is crucial to simulating regular shadows, like you see in material folds, since you rarely see hard edged shadows. These shadows are almost always soft and diffuse.



Blur at 20

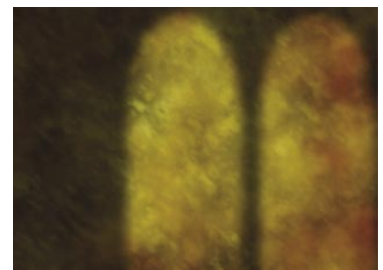


Blur at 80

With a higher Blur, the right-side image looks much more natural. The Shadow is Fabric/'Twice Hung'. The Texture is Blue/'Midnight Lake'.

### Reduce Distortion

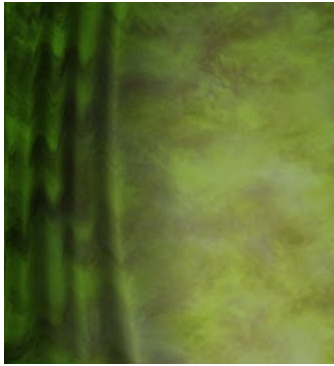
You can use Blur to soften a Shadow and reduce the amount of distortion it has created on your Texture. Quite often, a shadow produces too much distortion and creates a texture that doesn't look quite realistic.



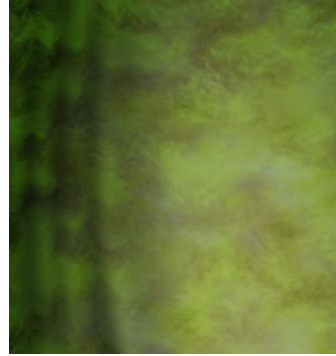
With a higher Blur, the right-side image looks much more natural. The Shadow is Fabric/'Twice Hung'. The Texture is Blue/'Midnight Lake'.

This over-distortion will happen in particular when you've used the Bend Editor, which distorts a Texture to give it a three-dimensional look. You can soften and lessen the distortion with Blur.





This Shadow is creating too much distortion on the Texture. It looks fake because the fabric seems stretched and the folds are too sharp. The Shadow is Side Drape/ 'Squeeze to the Left'.



The Shadow has been blurred and softened. The Texture seems less stretched and its simulated folds look smoother, creating a more realistic feel. The Texture is Green/ 'In the Forest'.

## Opacity Slider

The Opacity slider sets how dark the blacks in your composite appear. Opacity is critical to creating realistic shadowing. Done well, it will dramatically help you sell the look of folded cloth or a cast shadow.

### How it Works

When the Shadow is composited on a Texture, any tone that is pure white simply allows the underlying Texture to show through. Any shade of gray darkens the Texture. The darker the shade of gray, the darker the Texture will look. If you are familiar with Photoshop's layer modes, the results are similar to using the Multiply mode.

### Turn off the Shadow

If you want to render out the Texture only, set Opacity to 0%. This will hide the Shadow, effectively turning it off.

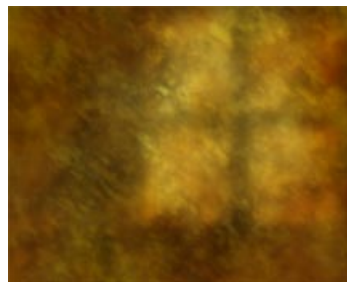
### Ambient Light for Cast Shadows

When using a Shadow to simulate cast shadows, you can use Opacity to control the feeling of ambient light. By a cast shadow, we mean light coming through a particular opening (such as a door or window), or light that is being obstructed by an object (like a chair).

In real life photography, ambient light affects how dark the shadows appear. This is dependent upon how much light there is, in addition to your primary light source. If there are no other lights and your light source is similar to a flash, your shadows are going to be very black. If you are dealing with sunlight or multiple lights, the shadows may look very light.

In Backdrop Designer, ambient light plays a role as well. So, if your cast shadows don't look convincing, experiment with making them darker with a higher Opacity. Lighten the shadows with a lower Opacity.

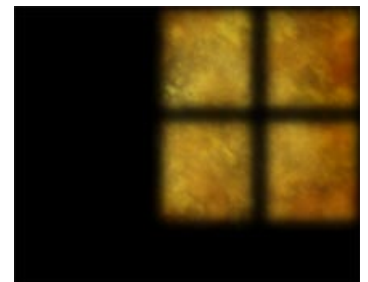
We have cast a believable window frame by cranking up the Opacity. The Shadow is Windows/ 'Four Squares'. The Texture is Orange/ 'Morning Liquid'.



Opacity at 30



Opacity at 70

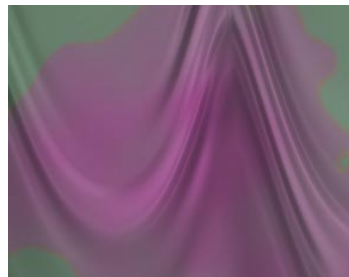


Opacity at 100

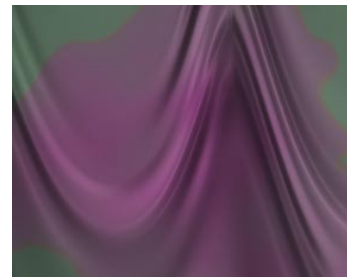
### Realistic Folds

To create convincing folds, you will often want to combine Opacity with the Bend Editor. The deeper the folds you're creating with Bend, the darker your shadows will usually need to be, and the higher you will set Opacity. If you are just creating a few soft folds, however, you will not want dark shadows and Opacity should be lowered.

This cloth looks best when Opacity is set high but not at its fullest. The Shadow is Fabric/ 'Twice Hung'. The Texture is Clouds/ 'Rose Kissed Clouds'.



Opacity at 70



Opacity at 85



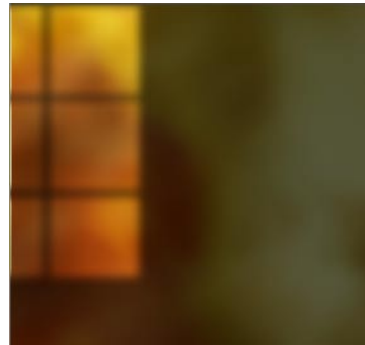
Opacity at 100

## Brightness Slider

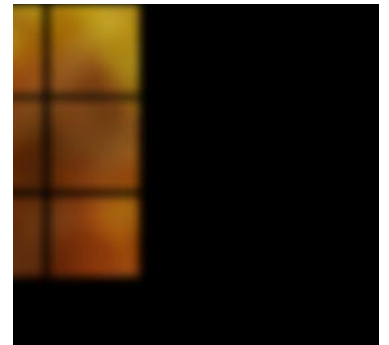
Brightness lightens or darkens the shadow. Negative numbers make the Shadow darker; positive numbers make the Shadow lighter.

It's a very straightforward function which can often be balanced by the Texture Brightness slider. This control works similar to the Brightness function in Photoshop.

Changing the Brightness of the Shadow changes the time of day in this example. The Shadow is Windows/'Six Panel'. The Texture is Orange/'Sherbert Smoothie'.



Brightness at 40



Brightness at -20

## Contrast Slider

Contrast increases the tonal values in opposite directions. A high level of contrast results in a Shadow with more blacks and whites. This control works similar to the Photoshop Contrast.

Be careful when adjusting Contrast. Set too high, the Shadow tones may look striated or banded. Set very low, the Shadow may not have enough visual impact. Starting at 50 and moving in small increments up/down is a generally good approach.

This fabric looks best in the center image, at a medium contrast. It gets banded when set too high. The Shadow is Fabric/'Drooping Sheets'. The Texture is Aqua/'Moonlit Waterfall'.



Contrast at -30



Contrast at -10



Contrast at 10

## Preview Window

The Preview Window is where you see what your backdrop-in-progress looks like. This main preview area shows a composite of the Shadow overlaying the Texture.

### About the Preview

Before we explain what the Preview Window does, we should discuss the window itself. You will spend probably more time looking at this preview than the individual Texture or Shadow previews.

### Preview Fits Canvas

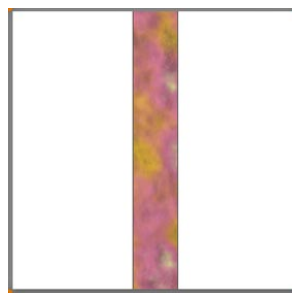
The preview will visually fit itself to the canvas to which you're applying Backdrop Designer. This function allows you to get an accurate preview of how your final render will appear.

If you have a really tall or wide canvas, the window will show a lot of white space. This white space does not render into your Photoshop file.

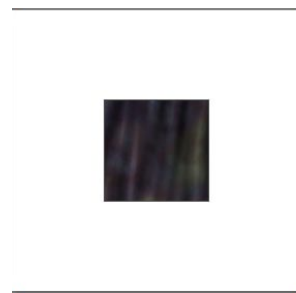


The main preview of your backdrop.

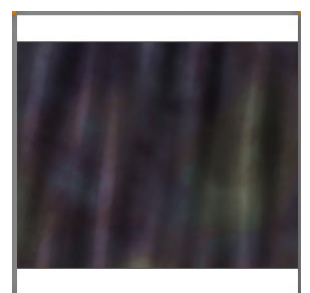
Notice the white preview around the small and vertical canvas areas. A near square canvas has very little white space around it.



File is 100x400 pixels



File is 100x100 pixels



File is 640x480 pixels

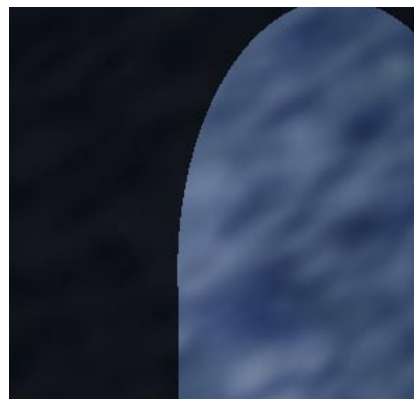
### Quality of Preview

In an effort to run Backdrop Designer speedily, the Combine preview is fairly low quality. In fact, it is lower quality than any rendering produced by Backdrop Designer. This means that when you hit the 'Apply' button, the final render will look better than the preview.

Perhaps a little better, but maybe a lot. The range will depend upon the quality you have set in the Render Options menu in the Menu Bar.

Because it's taking shortcuts to work faster, the Cmbine Window may preview undesirable attributes like jagged edges or artifacting. These attributes will not show up in your final render if you have the render quality set high enough.

The left-side image, which is the preview, has some jaggies where the shadow curves. The right-side image looks nice and smooth because it is rendered out in Best Quality.



Preview in Preview Window

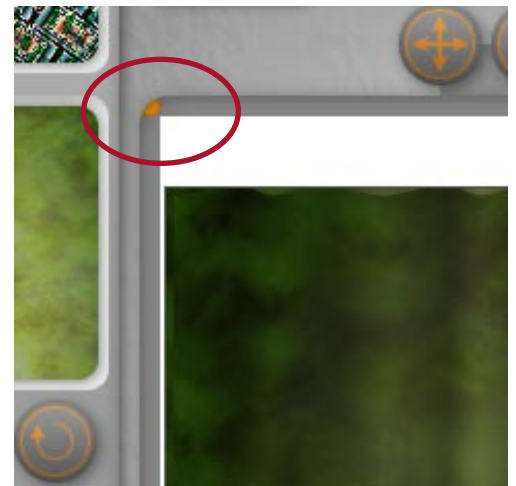


Render at Best Quality

### Resizing the Preview

You can grab the orange arrows at each corner to resize the Preview Window. This is great if you have a large monitor, as a larger preview allows you to see more detail.

However, resizing can slow down Backdrop Designer because the plugin has to build more. If you have a fast computer that's not a big deal, but if your computer is on the slower side, we recommend keeping the window small.



### Transform Tools

As with the Texture and Shadow previews, you can move, scale, and rotate in the Preview Window. Doing this transformation in the Main Preview will change both the Texture and Shadow.

This provides an overall shift in your Backdrop composite, but doesn't really allow for detailed changes. It is generally much more effective to transform either the Texture or the Shadow individually. This process makes it less likely that you will run into a problem area with either the Texture or the Shadow.



The Transform tools:

- (a) Position tool
- (b) Scale tool
- (c) Rotate tool

### Drag Then Pause

A note about working with the Transform tools in the Preview Window. You may find that the composite seems to hesitate when you drag to transform, especially with the Scale tool. Or the change you were trying to make, like scaling up, pops back to its original state when you let go.

The trick is to keep your cursor in place when you are finished dragging, until the preview has updated. That extra second or two is the workaround.

### Position Tool



The Position tool allows you to move the Shadow and Texture around. If you are not quite happy with where an element of the pattern is located, just scoot the Shadow left, right, up, or down. In fact, you can just click and drag in the preview itself, instead of using the Position tool.

These textures are infinite in size [remember our discussion about procedural textures and resolution independence?]. If you like the composite overall but don't care for its exact look, just click and drag to see other parts of its repeating, variable pattern.

### Rotation Tool



Of course, the Rotation Tool rotates your Combine preview. This ability is useful if you want to keep the composite but need its pattern or shading to match the direction of an element or effect in your photograph.



## Scale Tool



The Scale Tool can completely change the look of a Texture/Shadow pairing. The composite can look dramatically different at various scales. It may look like drapery when scaled up/zoomed in, but like puffy clouds when scaled down/zoomed out.



Default preset

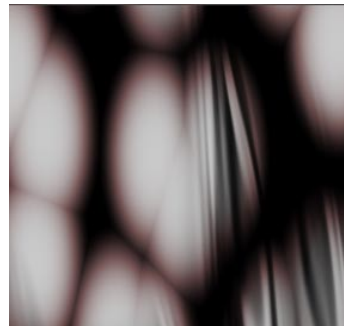


Scaled up (larger)

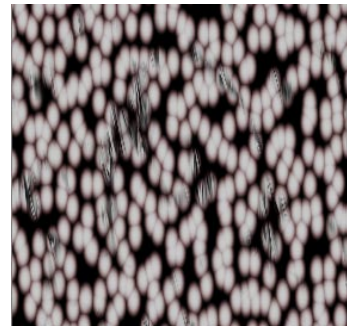


Scaled down (small)

The preset 'Heartbreak' from the Combine category 'Dreapery1'. When we simply scale it, the texture looks very different, especially at smaller sizes. We created three new presets for you while writing this section!



Scaled down (smaller)



Scaled down (very small)

## Mutation Controls

The mutations surrounding the Preview Window rely on the Texture and Shadow mutation settings to generate its variations. The Mutate Levels set for the Texture/Shadow and the options turned on/off in their Mutate Options boxes will also control the Combine behavior.

This interoperability allows Backdrop Designer to generate a fully new Texture/Shadow combo.

These mutations are very random, and at their default settings don't always produce usable results. By paying attention to the mutation controls, however, you can change this ratio.



The Preview Window:  
(a) Main preview  
(b) Mutate Wells

### How to Mutate

To generate mutations, simply click (don't drag) inside the preview well of the Preview Window. The Mutate Wells will change with each click.

If you click inside a Mutate Well, that mutation will load into the Preview Window preview, and display its corresponding textures in the Texture and Shadow previews.

If you click and load accidentally, don't despair. Backdrop Designer recognizes one level of Undo, and that mistake is undoable. To use Undo, hit Control-Z on Windows [Apple-Z on Mac].



The Combine mutation wells look and act like the Texture/Shadow mutate wells. Here we have clicked on one of the mutations to replace the original. Notice that the Texture and Shadow wells also changed. And now we have a new Combine preset... see 'Dripping Eggshells' in the 'Drapery2' category!

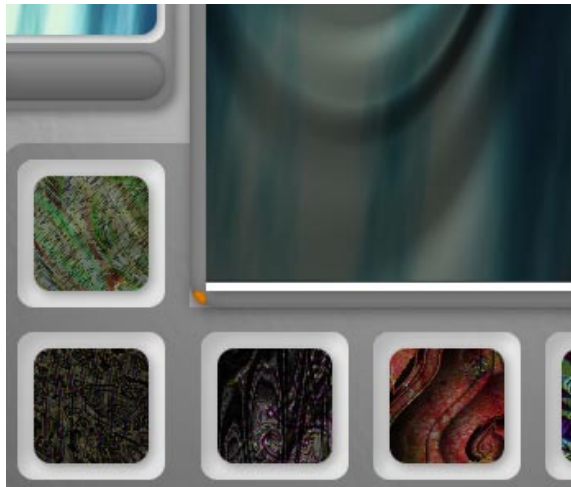
### Mutate Level & Mutation Options Box

As you may expect, the higher the settings for the Texture/Shadow mutations, the more varied your results in the Combine mutation wells.

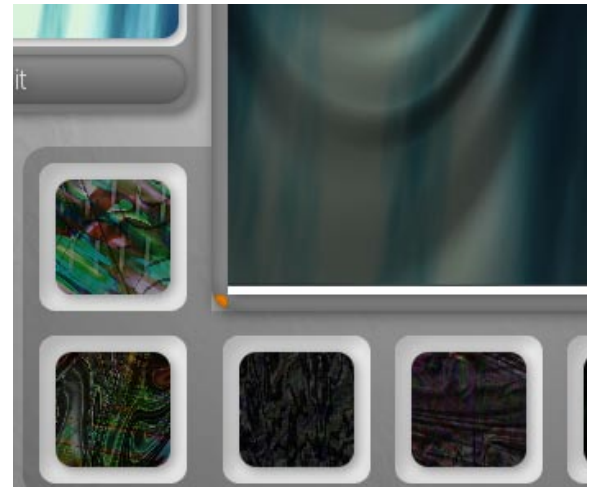
Mutate Level causes the different attributes of the Texture/Shadow to change randomly. This attribute is in the Edit pulldown of their respective windows. Mutating is most useful when both Mutation Level sliders are set below 10%, as it produces results that are similar to the original.

You may also want to turn off some of the Mutate Options. The Mutate Options box sets which attributes (like color, scale and pattern) of the Texture/Shadow change. Limiting the number of options that are turned on will keep the mutations less chaotic and much closer to your original composite. To access Mutate Options, click on the funky button in each Edit pulldown.

More complete details are described in the Texture Mutations, Shadow Mutations, and All About Mutations sections of this manual.



Mutate Level at 100 for Texture/Shadow



Mutate Level at 50 for Texture/Shadow



Mutate Level at 0 for Texture/Shadow.  
All of the Muatate Options are turned on.



Mutate Level at 0 for Texture/Shadow.  
With half of the Mutate options turned off, the mutations are even closer to the original Combine preview.

## All About Mutations

Here at Digital Anarchy, we think software should be easy, functional and fun. You should be able to play around and come up with visual effects that you couldn't have expected or even planned.

That's where mutations come in. While most of Backdrop Designer is aimed at allowing you to accomplish what you set out to do quickly and easily, mutations allow you to experiment and explore, if you so choose.

Take a look at the 'Understanding Textures' section for more specifics about how and why mutations work. If you're really interested in more info, download the manual for our Texture Anarchy plugin, as this subject is discussed in depth. Whoops, we snuck this reminder in one more time!

### Overview of Mutations

You can use Backdrop Designer just fine without ever looking at its mutation functions. They are in no way necessary for creating the thousands of backgrounds that Backdrop is capable of creating.

However, mutations are cool for a variety of reasons:

1. They do allow you to easily come up with backdrops that aren't part of the preset library. This potentially gives you backdrops that no other user has.
2. If you like a certain preset backdrop, but it's just missing that 'something', mutations can find the 'thing' you're looking for.
3. Have fun! Do some after hours experimentation to see what kind of cool, crazy, and even useful backdrops you can create.

There are two palette areas of the Edit dropdowns that control the level of mutation. One is the Mutate Level slider. The other is the Mutate Options menu. These mutation controls work with Texture mutations, Shadow mutations, and Combine mutations.



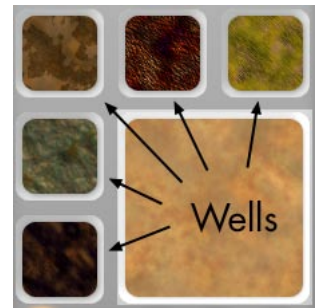


## How Do They Work?

Let's start off with the basics. The windows that mutations show up in are known as Mutation Wells. These wells operate much like the preview windows that you are already familiar with. There are Mutation Wells surrounding the Texture Window, Shadow Window, and Preview Window.

To create the mutation, just click inside the main (largest) Well. The other Wells will fill up with variations on that pattern.

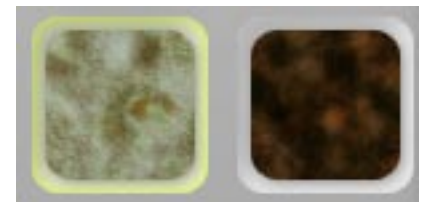
If you click and drag in a Mutation Well, you can move around the texture that's inside, just like the preview windows. However, if you JUST click, then the mutated texture is transferred into the Texture/Shadow/Combine preview window.



## Lock a Mutation Well

You can also lock a texture into a Mutation Well. Do this by Alt+clicking [Windows] or Opt+clicking [Mac] the well.

Locking is useful if you're surfing through mutations and you find one you think you like, but you're not ready to commit to it yet. Alt/Opt-click on the Mutate Well to lock, then continue generating new mutations. Now only the unlocked wells will show new textures.



Locked (left) and Unlocked (right). The green glow indicates a locked well.

## Mutate Menu: What Mutates?

The patterns that Backdrop Designer generates are composed of several different attributes.

Textures are created out of layers that are overlaying other layers of different types of fractal noise patterns. These patterns have unique scales, colors and rotations, and can be blended in a variety of ways.

When you mutate, Backdrop Designer randomly changes some of these attributes and generates a completely new texture.



The basics are:

1. Color, the hues in the texture
2. Noise, the basic patterns that make up the texture
3. Transforms, which refers to rotating, scaling, and panning the texture

While you can turn on/off any attribute, we recommend adjusting these:

- Gradient: With Gradient turned OFF, you will get mutations that are very similar in color to the original.

The Color option has similar results, but is more likely to produce exactly the same palette. If you want keep the original colors, then turn OFF the Color option instead.

- Noise: This option controls the overall look of the texture. Turning Noise OFF will guarantee you'll get something that is very similar in texture to the original, although the colors may vary.

Noise is usually responsible for the more wacky textures that you see. However, if you keep Noise ON at low Mutate Level values, it will give you some nice variations.

- Rotation, Scale, and Panning: You should generally leave these options turned ON. If however you like the way the texture looks but want slightly different colors, then turn OFF these and all other attributes except Color and Gradient.

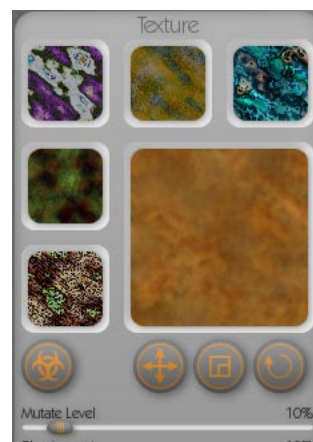
### Mutate Level: Keep it on the Down Low

Mutate Level causes the different attributes of the Shadow to change randomly. These attributes include color, scale, rotation, and pattern type. The higher you set Mutate Level, the more variation that will result, and the more the mutations will look different than the original image.

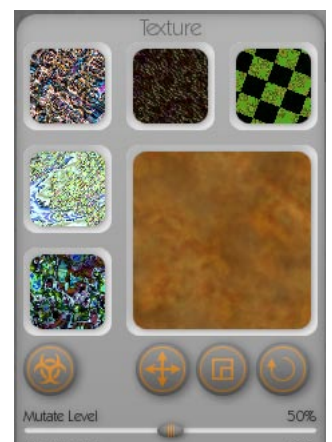
If you keep the Mutate Level to a low amount, like 10% or lower, this tends to produce results that are very similar to the original.



Mutate Level at 0



Mutate Level at 50



Mutate Level at 100



## How To Get Useful Mutations

The problem with the mutations is that they generate VERY random results which in most cases aren't subtle. So how do you mutate to something usable? Here's how:

1. Set Mutate Level to a low amount, say between 0 and 10. Mutate Level controls just how randomly Backdrop Designer will change attributes for the mutations.
2. Turn off the Gradient option in the Mutation Menu. If you leave all of the Mutation Menu options turned on, the mutations will get chaotic very quickly, even at low values.
3. If the results are still pretty wacky, then turn off the Noise option in the Mutate Menu. This will further reduce the number of weird results that you get.



Here we've turned off the Gradient option and set Mutate Level to 10.

## Shadow vs Texture Mutations

Shadow mutations tend to be a bit less random than their Texture counterparts. This is primarily because they are only rendered in grayscale and don't make use of colors.

Because of their lack of color, turning off the Gradient or Color options of the Shadow Mutate menu isn't very effective. If you are getting weird Shadow results, try turning off the Noise option.



Mutate Level at 0



Mutate Level at 7

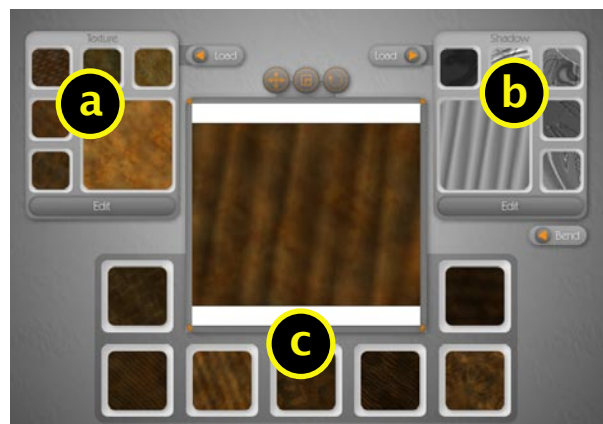


Mutate Level at 50

## Combine Mutations

The mutations around the Preview Window do not have any attributes of their own. They are entirely based on the settings of the Texture and Shadow previews.

If you click to load one of the Combine mutations, a new Texture and Shadow will appear in their respective windows.



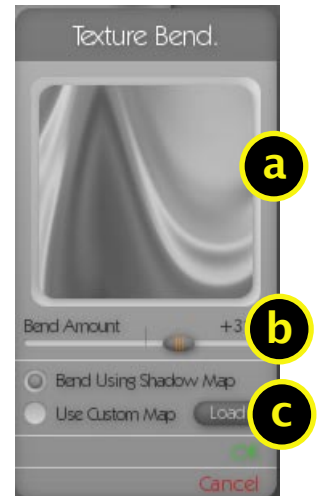
The Mutation Wells:

- (a) Texture mutations
- (b) Shadow mutations
- (c) Combine mutations

## The Bend Editor

The Bend Editor allows you to use a Shadow to distort the underlying Texture. This creates an illusion of the Texture bending around the Shadow's light/dark areas, which allows you to simulate three-dimensional surfaces such as drapery.

Once we explain how the Bend settings work, we will discuss how you can find good Texture/Shadow/Bend combinations.



The Bend Editor:  
(a) Preview well  
(b) Bend Amount  
(c) Custom loading

## Shades of Gray

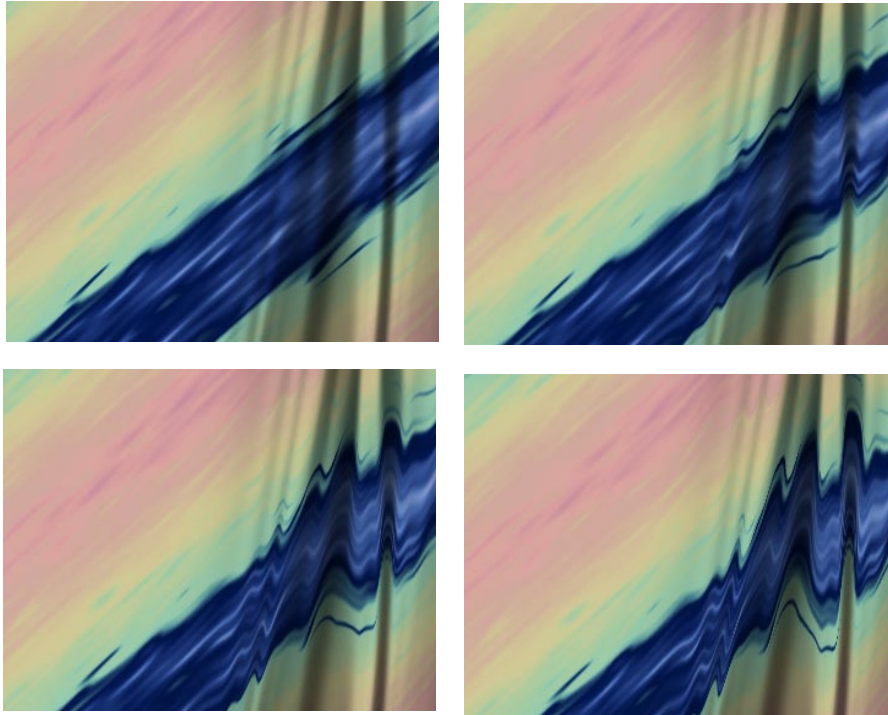
The shades of gray in the Shadow, along with the Bend Amount, determine how much the Texture will be distorted. The higher the contrast of light/dark areas in your image, the more distortion there will be.

Since this technique doesn't create a true 3D surface, it doesn't work for all Textures. Also, some Shadows work better than others, and Shadows that work great with one Texture won't necessarily work well with another. It takes some trial and error before finding the combos that work and look good.

## Bend Amount

Alright, so there aren't exactly a lot of controls for Bend. In fact, there is one. BUT, it does a lot. So pay attention. Bend Amount provides two functions:

- 1- Bend controls the amount of distortion that is applied to your Texture. The higher Bend is set, the more the Texture appears to wrap around the Shadow's dark/light areas.
- 2- Using Bend, the Shadow is blended with the Texture. This creates new dark/light areas in the Texture.



Clockwise from upper, left: Bend Amount of 0, 25, 60, 100

This combination of the Shadow creating dark/light areas and the Texture bending around those dark/light areas can create a very convincing simulation of 3D surface, like material folds.

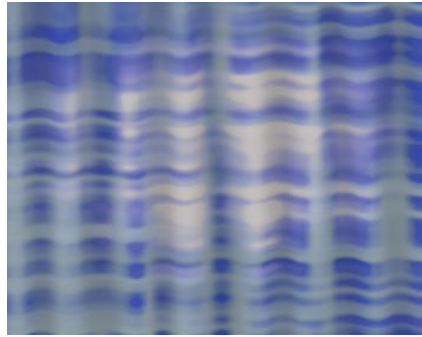
To create its effect, Bend Amount makes use of the Shadow's contrast. The higher the contrast, the more impact Bend Amount will have.

### Contrast Impacts Bend Amount

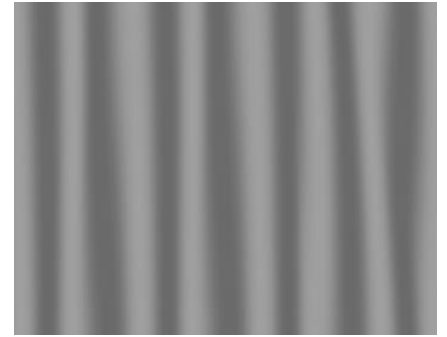
The contrast in a Shadow is also very important to how Bend works. By contrast, we mean the difference in tonal value of the light and dark areas of an image. Since a Shadow is always in grayscale, the lights are always white and the darks are always black.

Higher contrast Shadows will result in deeper shadows and brighter highlights, making the effect even more convincing. Low contrast maps work well in certain situations, such as simulating a matte surface or a surface that is only slightly distorted.

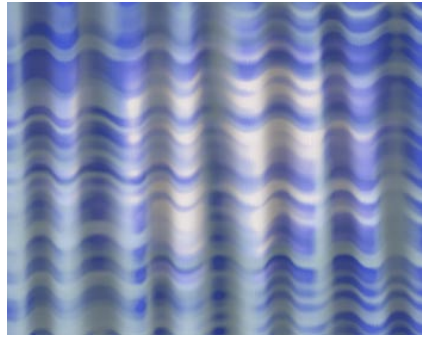
To explain the impact of using contrast effectively, we will use a few examples. In the following images, the attribute settings (including Bend Amount) are exactly the same. The difference is that the bottom Shadow has a much higher contrast than the top one.



Texture A, with a lower contrast Shadow



This results in the Texture being distorted more. It also produces brighter highlights, which makes the image look brighter.



Texture B, with a higher contrast Shadow

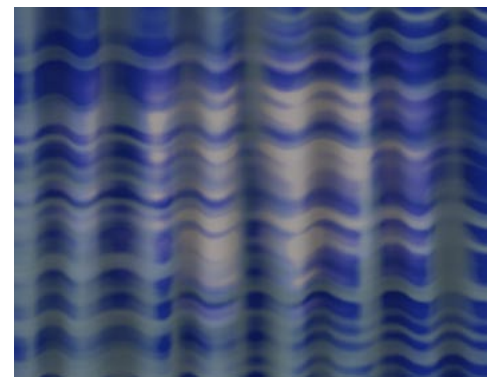


Even though Shadow B is low in contrast, you can still get a similar effect to the high contrast Shadow. The easiest way is to increase the Bend Amount.

## Increase Bend for More Contrast

To create more contrast in your Shadow, increase the Bend Amount. In our third example, we increased the Bend to 80%.

Notice that Texture C looks about as bent as it did with high contrast Shadow B. The significant difference is that the resulting image is still darker due to the Shadow being lower contrast. The Bend Amount has no effect on that.



Texture C, with the lower contrast Shadow but a higher Bend of 80

Also keep in mind that if we had set the high contrast Shadow to 80%, there would be even more distortion. If you want some really crazy distortion, you will want to use a high contrast Shadow.



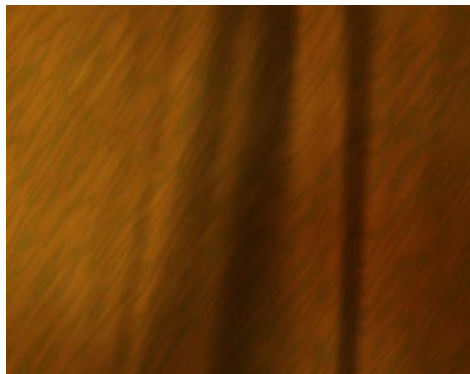
## Balance with Contrast Slider

You can also adjust the Contrast slider in the Shadow Edit controls. This doesn't have quite the same effect as if the Shadow were originally high contrast. Depending on the shades of gray in the original, low contrast Shadow, adjusting the Contrast slider may not give you exactly what you want. However, it might, so this is a good place to start.

## Too Much Distortion Will Smear

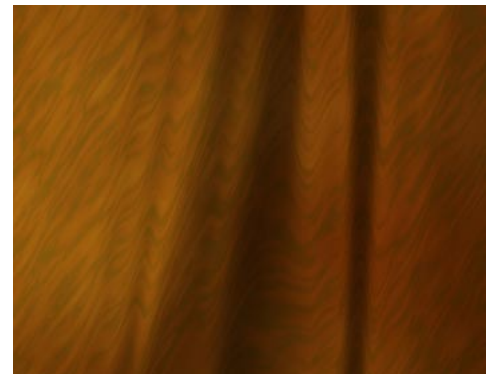
Yes, it's true you can actually have too much distortion. This is what your parents meant by 'too much of a good thing'. Some Textures you can distort like crazy and they look fine. With other ones, just a little will stretch them out in unnatural looking ways. So you have to keep an eye on them.

In our example at right, the left-side Texture has a Bend Amount of 25. Notice the nice curve to the texture where the dark shadows are.



Bend Amount of 25

Now look at the Texture at its right. We have increased the Bend Amount to 70. Notice the texture starts to 'smear', especially at the bottom of the main fold.



Bend Amount of 70

By 'smearing' (known as 'schmearing' in some circles) we mean an unrealistic blend of tonal values.

This type of problem can come up with ANY Shadow, regardless of whether it's high contrast or not. It is a bit more likely to come up with a high contrast Shadow. But just because your Shadow is low contrast doesn't mean you can let your guard down.



### Why Does This Happen?

Well, Backdrop isn't generating a real 3D surface. It's just kind of faking it. Usually this looks pretty good. However, if you fake it too much, as usual the seams show, the rabbits fall out of the bottom of the hat, and your illusion is broken.

The solution is to set Bend Amount to a lower value, or to use a lower contrast Shadow. Or even use a different Texture if possible. Some Textures are more prone to smearing than other ones.

### Avoid High Contrast

You definitely want to avoid VERY high contrast Shadows when using them to Bend. Shadows with well defined edges, like windows, don't bend well. And a wall isn't going to bend around a window shadow.

At right, this very high contrast window Shadow is producing extreme smearing along the edges. Creates an interesting effect, but its definitely not realistic. Using this hard edged type of Shadow for bending is always going to produce these results.



Using a high contrast Shadow gives an unrealistic bend

### Use Soft Transitions

You want to have a nice transition between the blacks and whites, as in our original Shadow at right.

The transitions between the two extreme values are very soft. This produces a smooth distortion and helps to eliminate the smear problem.



With Textures, the general rule of thumb is that the more defined the patterns are in a Texture the easier it will be to see the smearing. The more abstract a Texture, the less smearing you'll see.

As with most rules of thumb, this rule don't always hold true. Luckily, when this rule breaks, you only end up with a smeared texture and not a broken thumb. Much less painful.

### **Finding The Right Combo (Some Tips)**

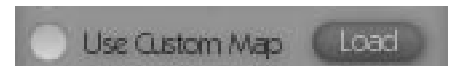
There is no digital magic to finding the right combination, just a bit of trial and error. Here are some suggestions:

- 1- First, if you have smearing, reduce the Bend Amount. See if you can get some combination of the Bend Amount and Shadow Opacity to make you (or your client) happy. If that doesn't work...
- 2- Remember that some Textures are prone to smearing, while others handle almost any amount of Bending gracefully. When you come across a Texture that handles itself poorly, just realize this Texture will probably be difficult to get good bending from, regardless of the Shadow you use.
- 3- Find a different Texture that will respond better. Smearing is usually a problem related to the Texture rather than the Shadow. Most soft Shadows will have the same effect on all Textures, so changing the Texture is the best approach.
- 4- However, if the Shadow is very high contrast, like a 'Window' preset., almost no Texture will look right. In this case, try changing your Shadow.
- 5- Sometimes just rotating or repositioning a Texture will help it to Bend better. If your client is really in love with a certain Texture, try transforming the Texture.
- 6- Adding a Blur to the Texture can be beneficial as well. The Blur may make the Texture less defined, which covers up any smearing.

- 7- Increasing the Blur on the Shadow is also helpful. Blur will soften the Shadow's contrast, which creates more of a transition between the blacks and whites, and smooths out the distortion.
- 8- Adjusting the Opacity of the Shadow can sometimes help cover up problem areas, especially if the Shadow is particularly dark. Although, its darkness is probably part of the initial problem since high contrast Shadows are more prone to smearing.

## Using Custom Shadows

You can use your own images as Shadows. Do this by loading in a bitmap file to use as a Shadow.



If you have your own photograph or a stock image of drapes, folded cloth, or any other surface, you can click on the Shadow Window's 'Load' button and browse to your image.

You can load any JPEG, BMP, or PICT image. You cannot load PSD, TIF, JPEG, or GIF files. You would not want to load a JPEG or GIF anyway, since those formats drop out detail in favor of compression.



## Custom Shadow Are Not Resolution Independent

One result of using a Custom Shadow is that the Shadow is no longer resolution independent. When using a regular algorithm-based Shadow, you can render out your backdrop to ANY size because these Shadows scale to any size you want without losing quality. This is not the case with Custom Shadows.

To maintain good quality, your Custom shadow must be the same size and resolution as the image that you are applying Backdrop Designer to. If it isn't, you may see jagged edges or other artifacts.

### Using Mutations & Edit Menu

When you load your Custom Shadow, you can see your image in the Shadow Preview window. Since this is a 'fixed' image, the Mutation Wells do NOT generate variations. The wells still preview regular Shadow mutations, but these are unaffected by the Custom Shadow.

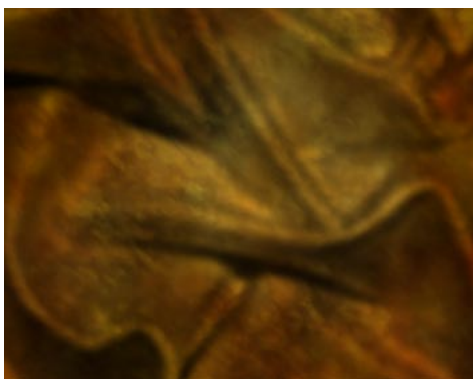
The Custom Shadow CAN be adjusted with all the Shadow attributes. You can blur it, change the opacity, and adjust the brightness and contrast.

Of course, you can use the Bend Amount to control how much distortion will be applied to the Texture. All the usual concerns about smearing are present with Custom shadows.

### Benefits of Custom Shadows

Using a Custom shadow is a great way of combining the flexibility of Backdrop Designer with real world images. All you need is a white sheet, some lights, and a high resolution camera. With these simple tools, you can generate all the 'realistic' drapery/cloth shadows you need.

Combine these custom photographs with the ability to generate literally thousands of different variations with Backdrop Designer, and you have an unbelievable amount of backdrops.



In this example of using a Custom Shadow, the Texture seems to take on the shape of the cloth image. It bends where it should and the image gives it the shadows and highlights you would expect from cloth.

## Use Custom Shadows as Workaround

If your Texture, Shadow or Composite doesn't scale intelligently, then your best bet is to try a different Texture or Shadow preset...

A pretty cool workaround is using the Custom Shadow option. It adds a bit of time to your work session, but is very powerful, as it gives you results that the presets simply can't.

Here are the steps to trick Backdrop using Custom Shadows:

1. Render out a Shadow by itself. Make sure you render out the Shadow to be the same physical size and target pixel resolution as your final image. If the resolution is different, you may see jagged edges or some blurriness.
2. Make some image adjustments in Photoshop to get rid of the undesirable part of the Shadow.
3. Load in the altered bitmap file as a Custom Shadow.



Our final rendered backdrop,.



Shadow07.jpg from the 15 loadable Shadow photographs that ship with Backdrop Designer.



Loading the JPG file into the Bend Editor through the Use Custom Map function.



Combined with the Slate Rose preset from the Pastels category in the Texture Preset Manager.

## Understanding Textures

In this section, we will give you a better understanding of what Backdrop Designer is doing behind the scenes. This will give insight into how you can better control its results.

For a truly in-depth look at the technology behind Backdrop, please take a look at the very deep manual for our plugin set Texture Anarchy. We created the Textures and Shadow presets with Texture Anarchy Explorer, and if you want to, so can you.

### The Overview

Most photographers just want a good tool that will help them generate cool, unique backgrounds quickly. We know this, because you've told us!

That is where Backdrop Designer comes in. While you don't need to know everything about what Backdrop is doing behind the scenes, it's helpful to know some of the deeper stuff.

### Using Algorithms

All of the Textures and Shadow presets are generated with mathematics. The advantage to this is that the textures become 'resolution independent'. This means you can render them out to any size file, from a wallet photo to a billboard, and they will be the same quality.

Unlike normal images that look pixelated when you scale them up or adjust their resolution, textures generated with algorithms always remain sharp and beautiful. By 'pixelated', we mean that you can see the checkerboard of pixels that create a pattern. For a smooth image, pixels should blend together by their tonal value and NOT be noticeable.

Scaling a normal image (left) and scaling a Backdrop texture (right). Notice the pixelation in the normal image, but the sharp details in the Backdrop texture.





## Textures Have No Edges

Being generated by algorithms also means that the textures go on forever. There really isn't any end to them. You can scale the texture or reposition the texture yet you will never reach its edge.

Think of a Sine wave: As long as you keep plugging in numbers a Sine wave will keep going on and on. There isn't really a beginning and an end other than where you decide to start and stop drawing it.



A Sine wave

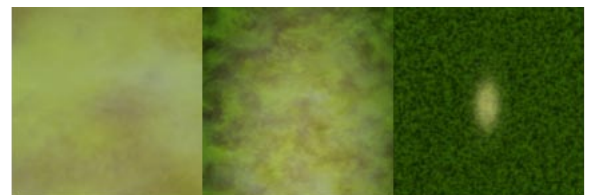
You can zoom in/out and you may see a longer or shorter Sine wave, but the wave doesn't really change. You are just using different values to create the wave.



Zoom In (left), Zoom Out (right). It doesn't really matter.  
Same wave representing different values.

Likewise, you can take the same pattern composite in Backdrop Designer and get very different looks just by scaling it up or down.

Same texture, different scale. Zoom In, Zoom Out,  
same texture, but this time it does matter.



## Why Should You Care?

Why should you care? Well, the last example should make apparent that you can get VERY different looks by just scaling or moving the texture.

This is good, but this can also be bad.

It's bad if you just want to make a small adjustment to the texture but suddenly the backdrop changes dramatically. This section exists to help you understand why this happens and when you need to watch out for it.

As you may have noticed, the Texture presets have different ‘features’ at different scaling levels. Very often we use just such a ‘feature’ of the Texture as the main part of that preset. The problem that comes from unexpected shifts is more severe with Shadow presets.

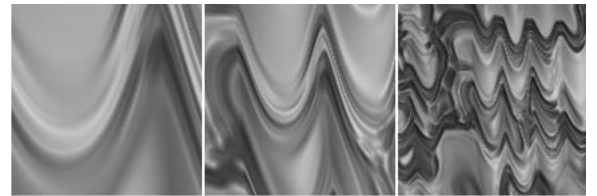
Different features: The browish blob at the bottom of the left-side texture. The soft green oval in the right-most texture.



A problem may occur when you zoom out of a Shadow. Suddenly that defining feature is now just a small part of the resulting texture.

You can see in the example below. We start off with some nice drapes, zoom out to some, er, interesting drapes, and zoom further out to garbage. By zooming in to focus on a small feature of the pattern, we create an interesting pattern of folds. Zooming out makes apparent that this feature is simply a small part of a larger texture.

The whole texture on the left-side becomes just a few pixels at the center of an oval in the right-most Shadow.

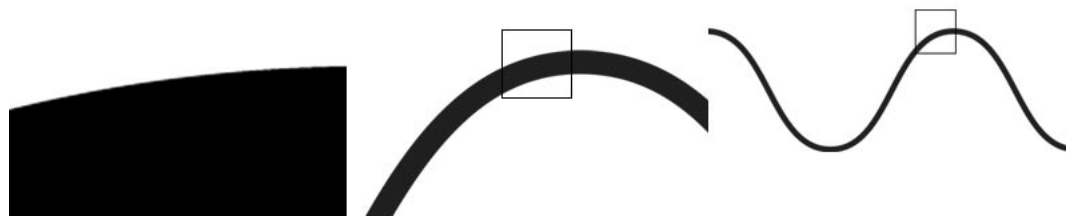


The bottom line: be careful about your expectations when scaling a Texture, or especially a Shadow, up or down.

### Further Fun with Sine Waves

Still don't quite understand what's happening?

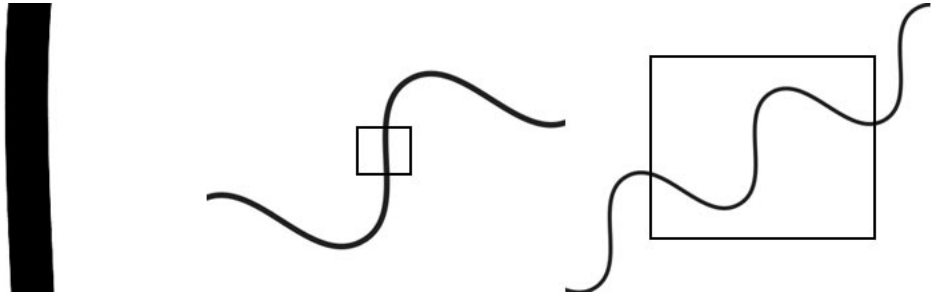
Let's go back to our Sine wave. If you zoom in very close, the Sine wave, can have all sorts of interesting features.



The previous examples show an extremely scaled up view of the top of one of the Sine waves peaks. If you were looking at the first image isolated, you'd never know there was a Sine wave there.

The same goes for these examples. The almost straight line comes from the Sine wave being rotated then scaled up.

The boxes indicate the section of wave that the previous frame was part of.



### How Sines Relate to Our Plugin

The hump and line are not features you would normally expect out of a Sine wave, but yet, there they are. The textures in Backdrop Designer work much the same way. Sometimes the textures have a feature when scaled up that they don't have normally.

We make use of these 'unique' features to create many of the textures. This is why, especially with Shadows, if you zoom out, the texture may change unexpectedly. The random features that make the textures interesting in the first place, cause them to be somewhat unpredictable.

This doesn't happen with all Textures and Shadows. Some do scale up and down as you might expect. However, you'll run into more textures that do change than don't, so it's good to know what's happening.

## Troubleshooting Section

This section covers a few known issues and frequent questions that arise when working with Backdrop Designer. These problems have been addressed earlier in this manual. We've decided to summarize them in one section to better point you to the correct solutions.

### Textures with Jagged Edges

If you're getting stair-stepped or jagged edges, set the render quality higher. You can do this by going to the Menu Bar and clicking on the triangular button to get the Render Quality list.

Usually setting quality to Normal will solve your problem. If it doesn't, try Best Quality.

You don't want to use Best Quality immediately or by default simply because it renders very slow. With large files, turning on Best Quality can result in hour-long render times.



Example of the 'jaggies'

See the Menu Bar section for more information about the Quality menu.

### Scaling a Texture Makes it Look Different

The Textures and Shadows are generated by mathematical algorithms. This math produces patterns that look very different at different scales.

Sometimes a preset will make use of a pattern at a particular scale. If you attempt to rescale the preset, you expose the pattern and its visual nuances as being just a small part of a larger pattern.

Please refer to the Understanding Textures section for more advice about scaling.

## What Does Render Mean?

Rendering is the process during which software draws something. When you hit 'Apply' for your composited backdrop, Backdrop Designer has to go back into Photoshop and create that backdrop from scratch.

The process of creating the backdrop and drawing the pixels on to your Photoshop layer is called 'rendering'. People paint and draw... Software renders.

You can adjust the quality of the render. This is like telling Backdrop Designer to take more time to create a more detailed image. The higher the quality, the better the image, the longer the creation time. You can adjust render quality (and speed) in the Render Quality dropdown on the Menu Bar.



## How Can I Make Backdrop Faster?

Backdrop Designer can take a while to render even under the Fast Render setting. When it is set to High Quality, your render may take an hour or more to render out a high resolution texture.

When do you need to use High Quality? Almost never. The only time you need to worry about High Quality is when the texture has jaggies, as noted in our first troubleshooting tip. Usually jaggies don't appear. When they do, increasing the Quality is the only way to get rid of them.

In most cases, Fast Render will give you very nice results, which means you do NOT need to bother with the slower render modes. With about 95% of the textures, using Fast or Normal Render modes will give you excellent images.

You should start off with the Fast Render mode and only render out to Normal or High when you see an obvious problem.