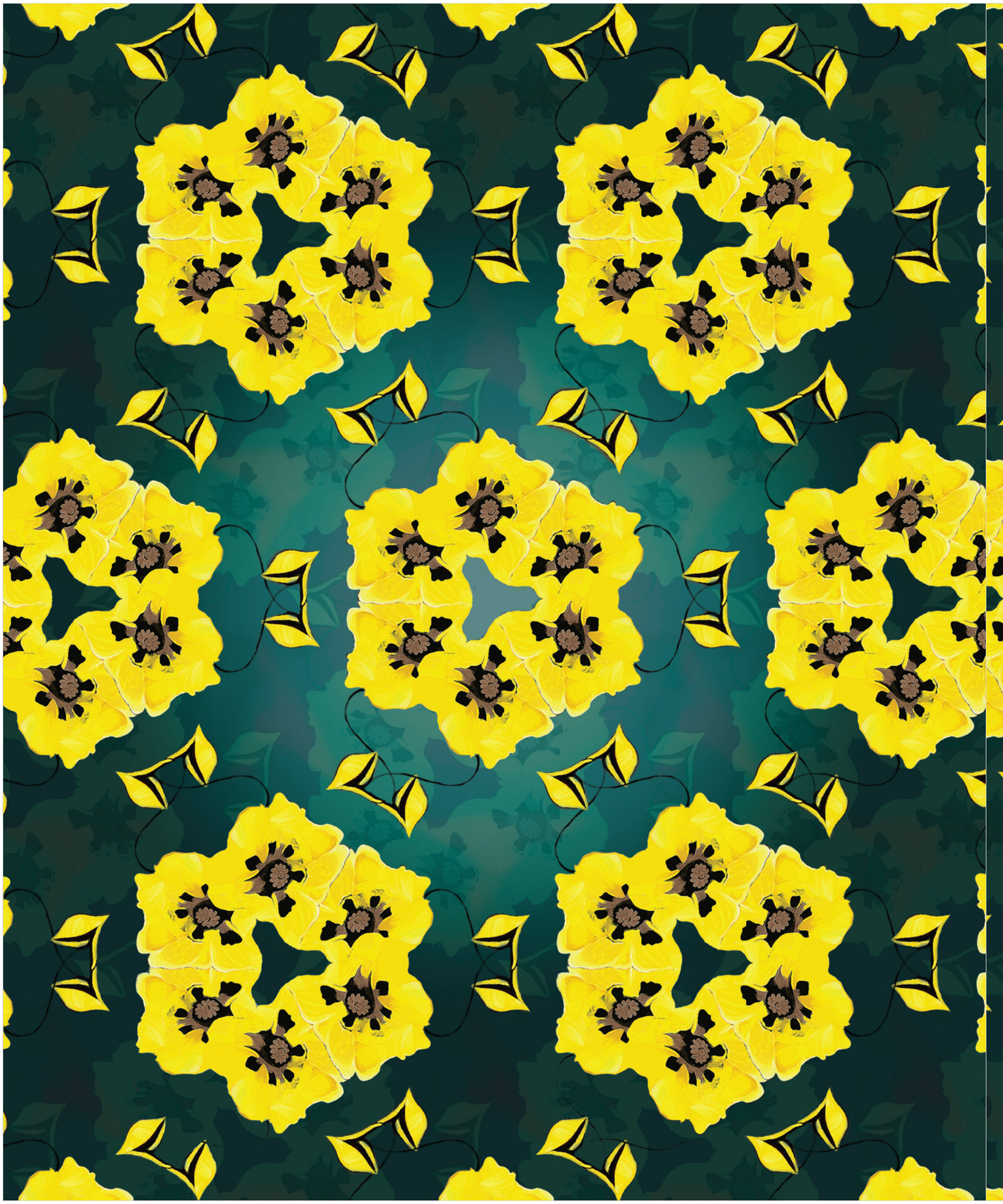


PHOTOSHOP • SYMMETRYSHOP

REPEATING PATTERNS

Patterns can be used in a number of ways to create intricate repeating images that can be put to a multitude of creative uses. **Hannah Gal** uses *Photoshop* and *SymmetryShop* to demonstrate the possibilities

ON THE CD

You'll find all the files you need to complete this tutorial in the folder marked Tutorial\Patterns on this issue's CD.

TIME NEEDED

2 hours

INFO

Hannah Gal is a digital artist whose client list includes such big names as Apple, Adobe, MTV, British Telecom, Getty, Photonica, *The Independent*, the *Guardian*, Wwav Rapp Collins, Amnesty, Sony records, Kodak, JVC and 10 Downing Street (the Blairs' Christmas card!), among others. Her Adobe-commissioned film *Breathe* has won global awards, and MTV made a documentary on its creation. This was followed by *Savage*, which premiered at this year's Edinburgh Film Festival. Find out more at www.hannahgal.co.uk.

There are several ways to create patterns in *Photoshop*, such as duplicating a Shape or using a Fill, Define Pattern or one of the application's many fantastic brushes. But if you're after even greater control, it's worth trying Artlandia's *SymmetryWorks* or *SymmetryShop*.

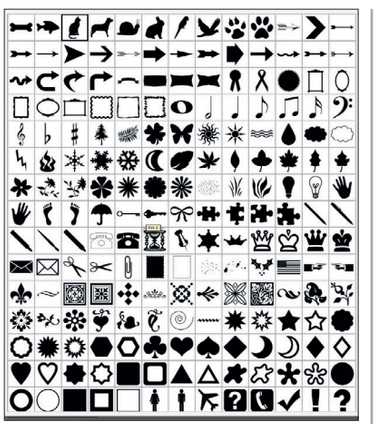
The first proved an instant hit with *Illustrator* users, and the company soon followed it up with a version for *Photoshop* users, *SymmetryShop*. Although presented as a companion to the first, *SymmetryShop* remains totally independent.

As well as automating features and speeding up the whole design process, *SymmetryShop*'s patterns remain fully editable throughout, so it's possible at any point, even after the design is complete, to revisit any previous step and practically rebuild the pattern. This kind of flexibility is a designer's heaven.

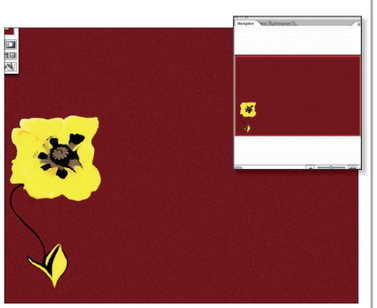
In this tutorial I'll demonstrate how *SymmetryShop* can turn a simple 'seed' element into an intricate repeating pattern – starting with the basic automatic *SymmetryShop* repeats, and ending with creative enhancement and export to *Photoshop*. You'll learn how to put many of the automated one-click repeats to use, adjust the Control Path, which is central to any *SymmetryShop* design, build interlocking patterns, use Feather to smooth boundaries between neighbouring elements, familiarise yourself with the many design presets, create your own background to the main design and export the finished design as a *Photoshop* pattern.

The last steps illustrate the seamless collaboration between *Photoshop* and the plug-in, as we turn to Adobe's own filters and effects for enhancement.

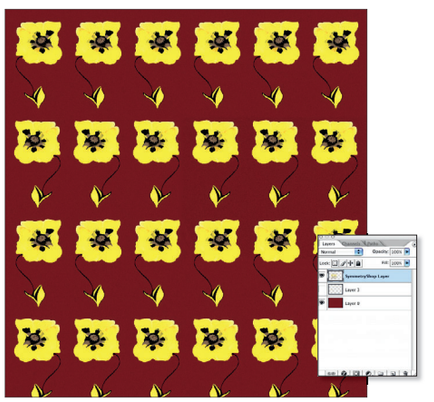
Illustration and tutorial by Hannah Gal
www.hannahgal.co.uk



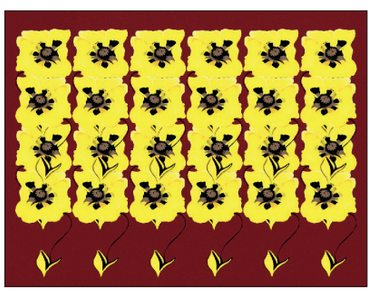
1 First open the file SymmetryOilFlower Motif.psd provided on this issue's disc. Alternatively, you could use *Photoshop* Custom Shape tools or any brushes for a more free-spirited design. Here I used an oil painting created in *Photoshop* and reduced it to size. Whatever you use, make sure your motif measures 200x200 to 300x300 pixels.



2 Place the flower motif on to a coloured canvas that has plenty of space for the pattern about to be created. This is very important. Use too small a canvas and *SymmetryShop* will warn you about image distortion due to lack of space. Position your motif at the bottom left of the canvas, not too close to the edge.



3 Now use any of *Photoshop*'s Selection tools to create a selection around your entire motif. Open *SymmetryShop* and you will see a palette containing a range of ready-made styles. Click on the Glide Reflection button and set the Tiling Size to 2-4. Click OK and return to *Photoshop*.



4 When you create a pattern in *Symmetry Shop*, the plug-in automatically saves both the Control Path in the Paths palette and the *SymmetryShop* selection. This keeps the design 'live' at all times, so you need not worry about saving the path and selection, or 'messing up' the design. It remains editable even after your pattern is complete.

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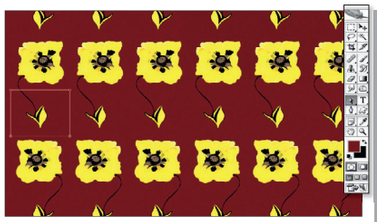
PHOTOSHOP • SYMMETRYSHOP

DROP AND BRICK REPEATS

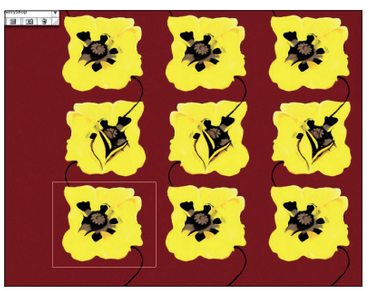
Half-drop, quarter-drop, and fractional drop repeats in general, are built into *SymmetryShop* and are of great importance to textile designers. To use them, create your motif and place it in the lower left area of the canvas. Now make a selection, open *SymmetryShop* and click the Preview box. Choose Half Drop from the long list of settings, and then use the H/W/X/Y sliders in the SymmetryShop palette to change the distance between the elements. You can set drop fractions from half to one-twelfth in the Constrain Shift menu.

SELECTION EDITING

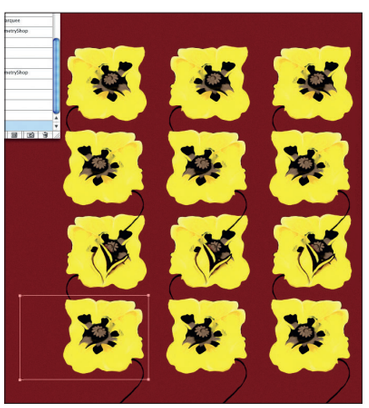
When you use a selection to create a pattern, *SymmetryShop* keeps both the Control Path and the selection intact. To edit the selection, click on SymmetryShop Selection in the Channels palette, followed by the Load Selection button at the bottom of the palette. In the Layers palette, hide the SymmetryShop layer. Editing can now be done via *Photoshop*'s Select menu.



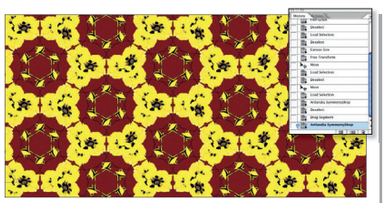
5 The Control Path sits at the heart of *SymmetryShop*, and it's the size and orientation of this Path that is used to build the pattern. You change the pattern by adjusting the Path from within *Photoshop*. Now open the Paths palette and choose the Direct Selection tool.



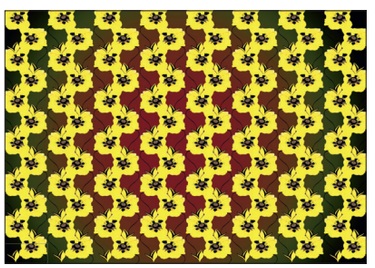
6 Drag the top part of the path down to your motif design's 'point of change'. In this case it's just below the petals and above the leaves on the stem. Experimentation is highly recommended. Simply adjust the path in *Photoshop* and run the plug-in to see the effect. Click OK to return to *Photoshop*.



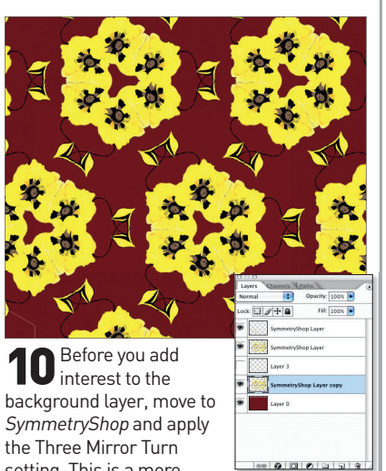
7 When you reduce the Control Path's height, you will instantly decrease the distance between pattern rows. To move these rows to the left a little, drag the left side of the path to the left. This will widen it by 20-30 per cent.



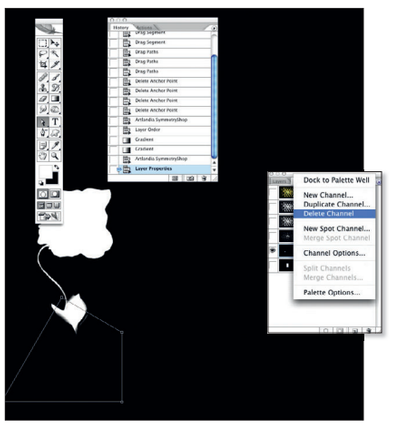
8 Select the entire Control Path with the Path Selection tool, drag it as a whole to the left and rebuild the pattern. Your choice of style is only applied when you click OK, so experiment with the styles on offer, such as the Kaleidoscope pattern seen here. Click on the Glide Reflection pattern to apply it, and return to *Photoshop*.



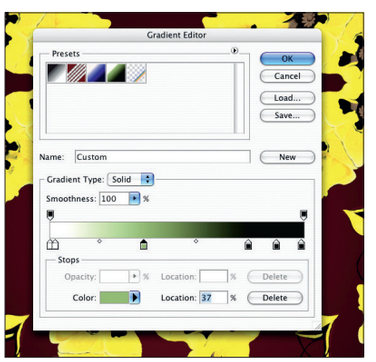
9 The stems will now be lined together. Return to the SymmetryShop palette and, with Preview pressed, adjust the Height/Width/X/Y settings to achieve the desired distance between elements. This can be a lengthy process, so be prepared to wait.



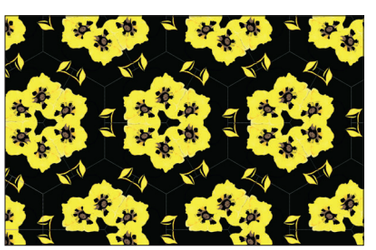
10 Before you add interest to the background layer, move to *SymmetryShop* and apply the Three Mirror Turn setting. This is a more 'spacious' design that will show more of the background layer underneath. Make a copy of the SymmetryShop layer and name it SymmetryShop Layer Copy.



11 In *Photoshop*, open the Channels palette and delete the *SymmetryShop* Selection channel. It will not be needed for the next few steps.



12 Now select the Gradient tool from *Photoshop*'s toolbox and choose Linear Gradient from the Options bar. Open the Gradient Editor and choose the Special Effects presets. Finally, choose the Green preset and apply.



13 *SymmetryShop* will automatically use the path that is still in place from the main design to create your background pattern. With the Clip at Control Path box selected, apply the pattern to the background. You might wish to increase the tiling size for a clearer repeat.

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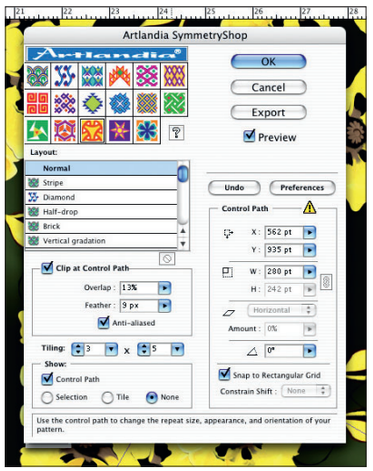
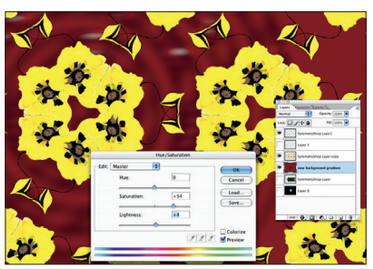
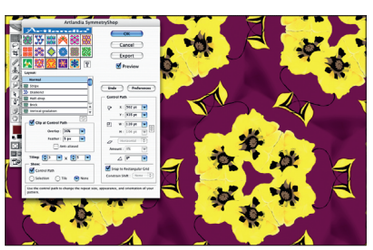


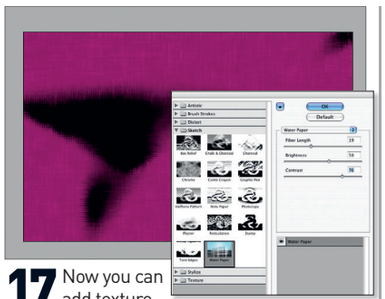
14 You can now use *SymmetryShop*'s Overlap and Feathering controls to smooth away the tile boundaries. Open *SymmetryShop* and, with Preview selected, set Overlap level to 13 per cent and Feather to 9 pixels. Again, experiment here with different values to see what effect you create.



15 With the background layer separate, your creative options for enhancement are endless. Open Hue/Saturation and move the sliders to see how different coloured backgrounds affect your design.



16 Here I kept some of the backgrounds generated through experimentation as separate, inactive layers. The final selection was a deep purple shade. Choose this shade and open *SymmetryShop* to adjust X/Y settings, change the distance between the tiles and get the desired background look.



17 Now you can add texture to the background. Select the background layer and go to Filter→Sketch→Waterpaper. Set Fibre Length to 19, Brightness to 58, and Contrast to 76. Your canvas might be a little on the large size, and feel a touch sluggish, so be sure to work on a small selection first before applying a filter to the entire layer.

18 *Photoshop* filters are particularly effective at this stage, so open the Filter Gallery and experiment with different filter treatments. Add a painterly look to the flowers by selecting Filter→Artistic→PaintDaubs and setting Brush Size to 3, Sharpness to 3 and Brush Type to Wide Sharp.

19 In *SymmetryShop*, click on Export. The pattern you created will be added to *Photoshop*'s Pattern library and can now be used in a multitude of creative ways. In *SymmetryShop*, pressing Alt while clicking on the Export button switches it to Export As, giving you the option to name your pattern.

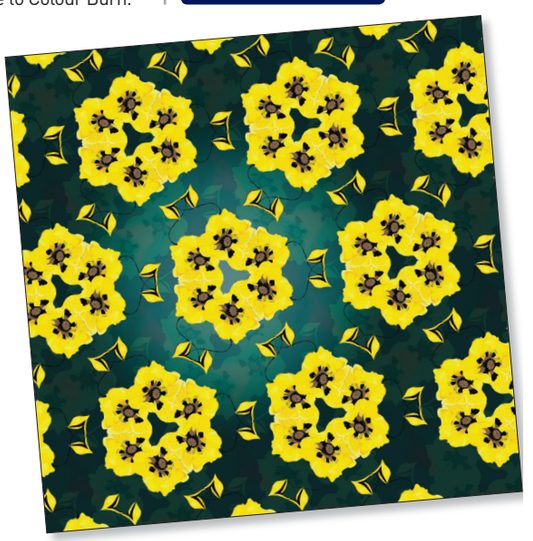
20 In *Photoshop*, select SymmetryShop Layer Copy and change the Blending Mode from Normal to Hard Light. This will bring out the oil colour texture on the petals, and enrich the design.

21 Activate one of the experimental background layers mentioned in step 16. Set green as the foreground colour and white as the background and apply a Radial gradient. Place this at the bottom of the Layers palette. Copy the main Flower Pattern layer and place it in between the Radial gradient background and the original pattern layer. Reduce its Opacity to 16 and change its Blending Mode to Colour Burn.

AUTOMATIC POWER

Actions are one of the most useful, yet often forgotten, *Photoshop* features. Click on the New Set button in the Actions palette and, in the New Action dialog, type in 'SymmetryShop' as the name of your new Action. Designate a function key and select the Command checkbox. Now click Record and open the plug-in by going to File→Automate→ ArtlandiaSymmetryShop before clicking OK. Click the Stop button in the Actions palette.

22 Once your pattern is finished, *Photoshop* becomes your creative palette. As you enhance your creation, you might wish to go back and adjust the distance between tiles or see the new background under a different pattern style. The exported pattern could also be used as a really impressive bold brush stroke, as seen in step 19. arts



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