



Designed by Nature

The art of creating
repeat patterns using
natural images as
your inspiration

By Tina Whiteley

In the April newsletter I discussed using nature as a source of inspiration for textile artwork and one of the ideas featured was how to make patterns from your own photographs, or from images in books, newspapers or magazines. This tutorial explains in more detail how to do this.

You will need

For digital pattern making

- Photographs or images
- Adobe Photoshop or similar computer software to trace or modify your images

For manual pattern making

- Photographs
- Pencil
- Marker pen
- Eraser
- Tracing paper
- White paper or card
- Photocopier
- Scissors
- Sellotape / sticky tape

This is a fun little project to try that will teach you the principles of making a repeat pattern from shapes, which can start out looking quite organic, but when duplicated over a larger area, become geometric in design. The patterns are reminiscent of Aztec or Inca designs and are a good way of bringing an ethnic or tribal quality to your work,

The instructions below outline one way of making a repeat pattern, using digital or manual methods. There are other ways of making patterns, but this tutorial is designed to help you to go from photograph to stitched out design or quilt block in the simplest way possible.

I have included instructions for Photoshop CS5, for those familiar with this software and who prefer to work digitally. The hands-on method uses a photocopier and tracing paper for those who enjoy working manually. Either way gives the same result.

If you have any other software on your computer that allows you to work in layers, or to copy, paste, flip and rotate and also draw over the top, you can do this project on that software too. The scope of this tutorial unfortunately does not allow for detailed instructions in the use of the software, but merely outlines how to carry out the actions required to make the patterns electronically.

Ideally, just choose the method that works best for you and work through those steps. Feel free to adapt any part of this pattern process to work for you in your textile creations.

Creating a Motif Digitally

Step 1 – Open the image

- We start with a square image or photograph, such as the one shown here:



- Select your image and open it in Photoshop.

Step 2 – Open the layers menu

- Click on the layers button to open up the the layers menu.

Step 3 – Create a new layer

- Create a new layer on top of the background. Leave the background layer visible, but highlight the new layer as the layer you are working on.

Step 4 – Trace around the image shapes

- Using the brush tool with a pixel size large enough that you can see what you are tracing, draw around a selection of shapes, either tracing the shapes off the page or enclosing a shape completely, as shown below. Don't leave any gaps in your traced lines, otherwise it will cause problems filling the shapes with colour later on, if you wish to do so.



Step 5 – Turn off background to reveal motif tile

- Turn off your background photo layer and you're left with a series of shapes that you can work with.

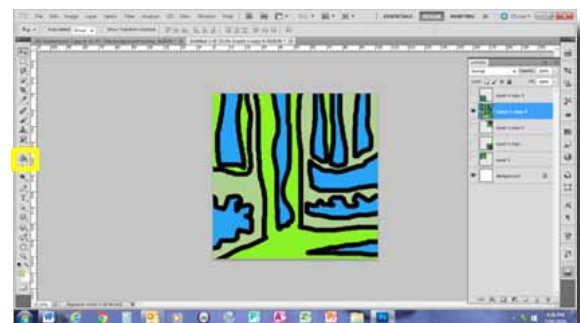


Step 6 – Copy and paste the motif tile to a new document

- Select the shapes tile, copy and paste it into a new Photoshop clipboard document. This design will essentially be your motif tile.

Step 7 – Add colour to the outline shapes

- If you wish to do so, colour in the various shapes using the paint bucket tool. If you prefer, you can also change the black outline to match the shape colour, using the paint bucket tool.



Step 8 – Resize and copy the motif tile

- Using the edit menu, resize the motif tile to 50% width and height and then copy it 3 more times, so you have a total of 4 resized motif tile layers.

Step 9 – Match up the motif tiles to make a pattern block

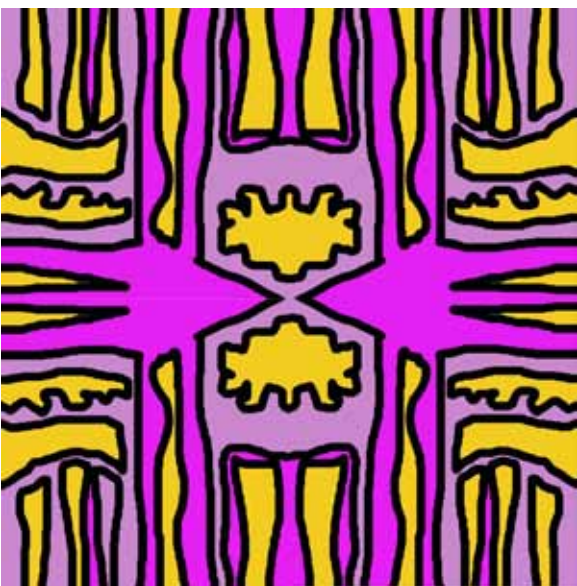
- With your layers menu open, flip, rotate and align each of these motif tiles vertically

and horizontally on the clipboard document, as shown below, so that you have a tiled pattern that will match up evenly on all sides. (I've left a gap to show you the four separate tiles, but you need to push them together for a seamless design).

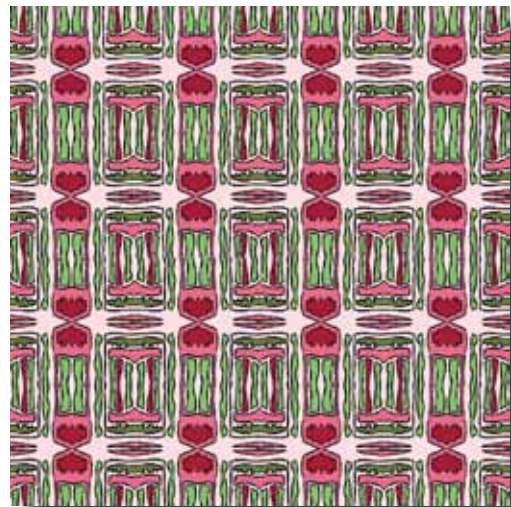
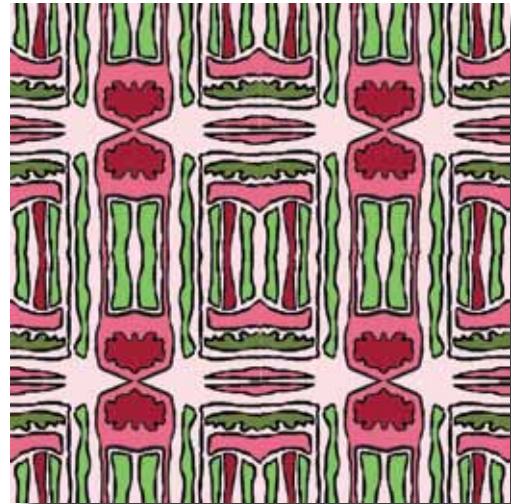


Step 10 – Saving your work

- This is now your pattern block, consisting of four motif tiles. If you wish to work on it further or modify it at a later date, save the file as a .psd file. If you just wish to use the pattern block as it is, then flatten the layers and save the file as a .jpg file. You can still adjust the image hue and saturation to quickly provide different colour options.
- You can use it to make templates that can be traced to outline shapes for machine embroidery stitching, which is one way I used my pattern block. You can also use it to make appliqué shapes or art quilts. These would work well coloured in with fabric crayons and then quilted over the top with matching threads.



- This pattern block can be further copied and grouped to make a more complex design if desired. If you choose to keep replicating the tiles and matching them up together you can see how your overall quilt or piece of work will look when finished. You can even print out your unique design onto paper or fabric for cards or gift-wrap.



Creating a Motif Manually

- Start with a square image if you can, or extract any part of the photo so that it fits into a square box.

Step 1 – Tracing the image

- Trace a square box around all or part of the photograph you are using onto the tracing paper and then trace around any shapes you like from the photograph, within that box. Determine the size of your square to begin with - ideally so you can get at least 4 boxes side by side onto a sheet of A4 paper or card. You can always adjust it later to fit your design.

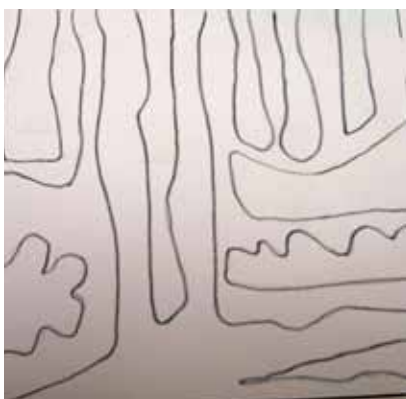


this again with the reversed image, so you have two traced mirror image copies side by side, but a little way apart. Go over your lines again in pencil or marker pen, if they are too faint.



Step 2 – Re-trace the mirror image

- Having traced your design on one side of the tracing paper. Turn it over and trace over the top of your lines again in pencil. You now have the design on both sides, so you can do mirror image copies.

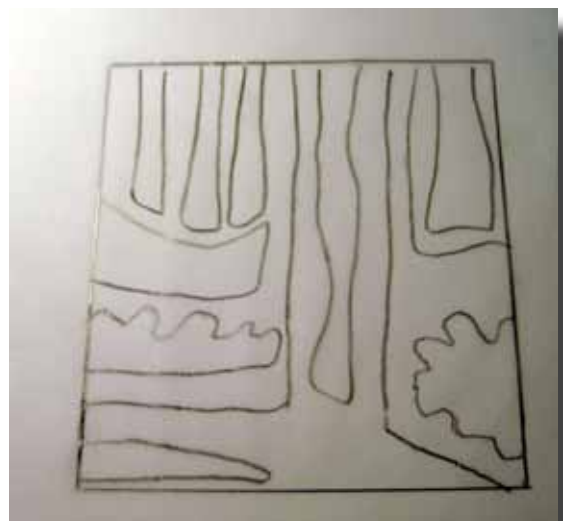


Step 4 – Photocopy the design motifs

- Using a photocopier, make two copies of the A4 sheet with the two traced motif boxes. (if you don't have access to a photocopier, just repeat step 3 twice. You want to end up with three A4 sheets each with a set of mirror image motifs. One will be your master copy for future use and the other two will be your working copies.

Step 3 – Transfer the design

- Place the tracing paper on a sheet of A4 white paper or card, and transfer the lines by retracing over them onto the white surface. Do

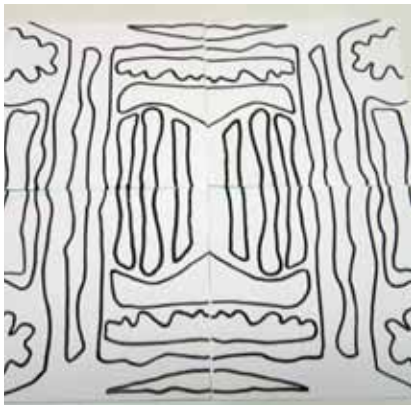
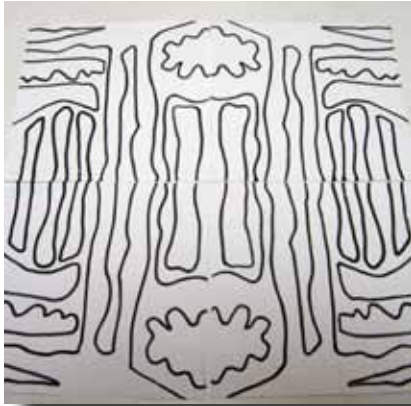


Step 5 – Cutting out the design motifs

- Take your two working A4 sheets and cut out four copies just inside the square box lines.

Step 6 – Arranging the motifs into a pattern block

- Place the 4 photocopies together so they make up a complete pattern block as shown. There are usually a few options for designs.



Step 7 – Assembling the final pattern block

- When you're happy with the final design, tape the pieces together on the back and then photocopy the whole design again onto a sheet of A4 card and this will be your complete pattern block from which you make your templates or trace off any sewing lines. From here you can resize your pattern block up or down, depending on your paper size. Colour in the shapes if you wish, or cut out the individual elements for appliqué templates.

Conclusion

- You will see the final pattern looks completely different from the original reference

photograph, giving a very geometric look. Depending on how you trace your lines you will get completely different motifs and patterns and a lot of the fun in this process is trying out different tracing and colour possibilities.

- I used my pattern pieces as the basis for digitising a cushion cover design. I took the image of the pattern block into Digitizer MBX software and then converted the shapes to stitches. I refined the design to simplify some of the shapes and chose suitable colour threads (I could have left the colours as they were, but this is a design that I will revisit and make sets of cushions in different colours). The pictures on the next page show the design progression.

- I hope you have fun trying out your own patterns and using them for a number of different projects.

Design progression from the initial photograph to the completed work

