

# Quilting for Effect

Of all the components that go into making a quilt, the actual quilting is perhaps that aspect which is most neglected in the early years of a quiltmaker's career. The reasons for this are understandable.

Firstly, the sewing technique for quilting must be mastered. Whether the quilting is done by hand or machine it takes care, practice and time to develop a satisfactory technique so as to maintain a true, even line. Secondly, hand quilting can be time-consuming. Even though most quilters appreciate the enhancement an elaborate quilting pattern can bring, many find the time required to achieve it daunting, and so opt for simpler solutions. However, any additional hours spent should be thought of as bonding, and that work will add years to the life of the quilt. Finally, early lessons in quilting usually tend to emphasise the making of blocks and use of colour, and teach only the most simple quilting designs and techniques. This, of course, is appropriate in most cases because the setting of too high a standard could easily discourage the enthusiastic novice quilter.

After the apprenticeship has been served and the quiltmaker is ready to explore more intricate and adventurous projects the quilter is often in need of direction and guidance as to how this may be accomplished. This is in spite of the many publications available on the practical aspects of quilting. Not uncommonly one sees at this stage, quilts which have either insufficient quilting or make inadequate use of available patterns and techniques. The quality and quantity of the quilting will be a major factor in determining the longevity of a quilt.

This article hopes to do two things: firstly, to demonstrate the significant improvement in a quilt's aesthetic appearance that can be achieved by greater attention to the extent and quality of the quilting design; secondly, to provide some guidance and direction by discussing some of the quilting designs and techniques employed. This is not a "how-to-do-it" article but rather one concerned with making decisions, which will affect the final appearance of the quilt.

## *Early Quilts*

For early American quiltmakers the highest accomplishment of the quiltmaking art was considered to have been attained by those whose quilts were lavishly quilted with very fine stitches rather than those whose quilts were expertly pieced. This viewpoint is supported in more recent times:

*"Quilting should play as large a part in the creation of a beautiful quilt as other workmanship, colour and design."* (Jinny Beyer)

British quilts, particularly those of the whole cloth variety, have been undergoing development for centuries; the height of their popularity occurred during the latter half of the 19<sup>th</sup> century. These quilts produced with masterly touch, display, as their sole artistic focus, ornate stitching patterns which in some instances were drawn by professional artists. Patterns from these whole cloth quilts are still in use today.

Those Amish quilts made between 1870 and 1940 for use as bedcovers are known for their striking colour, simple geometric piecing and exquisite quilting; they now adorn the walls of public and private galleries as contemporary art pieces.

## *Quilt to enhance*

Quilting has both a functional and an aesthetic purpose; put simply, it is the bones of the quilt. Its functional role is to bind together the three layers of the quilt so that they do not move upon one another. Batting manufacturers specify distances required between quilting lines and these should be considered as minimum distances. Unquilted areas of a quilt are a liability, where the unsecured batting will likely pull apart with use. More importantly, quilting is an artistic tool which provides or complements the aesthetic appeal of the quilt and transforms the two-dimensional design into a richly embellished surface. However, unlike paint applied to only one side of an artist's canvas, quilting stitches create a second surface on the back of the quilt making them double-sided works of art. In general, quilting is to a quilt backing what a brocade weave is to fabric – it adds light, shadow and dimension. Something special, even magical, happens when the quilting begins. Smooth fabrics take on an intriguing texture, motifs stand out in crisp relief, and graceful patterns swirl across blocks with no regard for piecing boundaries. Quilting is a process, a stitch-by-stitch transformation of fabric and batting into something difficult to describe and pleasing to behold. When the quilting design is selected a vital personal ingredient is contributed to the quilt.

How much quilting should be employed? This is a question pertaining to the artistic design of the whole quilt and should be answered at the time that other design decisions are made, namely at the planning stage. In some pieces the quilting will be the principal artistic component; in others, the block design and colouration will predominate. Even in these latter types the quilting pattern should be evenly distributed over the whole quilt top surface and enhance the quilt top, but there should still be enough quilting to hold it together well. In many quilts the quilting pattern will contribute about equally to the aesthetic effect. Quilting shows up better on solid fabrics than on prints; sharp colour contrast affects quilting too, causing quilting lines to appear broken. Interestingly, the reverse happens; curved quilting lines can visually bend straight piecing lines and merge colours.

While traditionally quilting is done by hand, the speed with which a quilt can be completed when a machine is used more than makes up for any negatives. It is fast and sturdy and when done well, very beautiful. Machine stitches are tighter than hand stitches and they compact the batting more, so designs will be more defined and textured. Regardless of whether the stitching is by hand or machine, it should be the quality of the work and the skill that it takes to achieve the final product that is appreciated. As long as the workmanship is of high quality, it should not matter which technique was used.

There are a number of features of quilting which will affect the final appearance. By far the most important of these is the quilting pattern or design. Confidence is gained as the quilter takes more time to look at these. Much of this article will be concerned with consideration of the choice and extent of quilting patterns. Other features include the type and length of stitch, the type, colour and weight of thread, and the use of supplementary quilting techniques.

### *Quilting Patterns*

A quilt will commonly feature several design elements. For the purpose of description these will be referred to as the block (piecwork or appliqué), colouration and quilting patterns (or designs) accordingly. The quilting pattern employed will have a relationship to any other pattern existing in the quilt. This relationship can be enhancing, complementary, contrasting or independent.

Most quilting patterns can be classified into the following five groups: outline, texturing, grid, border and motif patterns. Patterns can be described as either geometrical (triangles, circles, diamonds, stars, etc) or naturalistic (leaves, flowers, etc).

### *Outline Patterns*

In an outline pattern (or by-the-piece) the stitching follows about 5mm ( $\frac{1}{4}$ " ) inside or outside the edges of a shape. Outline patterns serve to emphasize existing piecework or appliqué patterns. They are simple in concept, design and execution and are probably the most commonly used of quilting patterns. When used alone, their purpose is mainly functional.

A related non-decorative stitch is the quilt-in-the-ditch. As the name implies, the needle is passed through the seams in the patchwork. This is quilting without showing the stitches. Ditching anchors the edges of the block or shape and tends to raise it. Used alone, it adds little aesthetic interest to the quilt because it provides no surface texture. However, as a practical point, ditch stitching, which is easy to do by machine, can make it easier to perform surface stitching by anchoring the edges of blocks, stabilizing, and reducing movement between the layers. A pieced top usually deserves more quilting than stitching-in-the-ditch.

### *Texturing Patterns*

Texturing patterns (also called filling, infill or background designs) are used to fill spaces within shapes and around patchwork patterns, appliqué and quilted motifs. They are closely sewn, compressing the quilt layers, and are associated with an adjoining shape, which, if unquilted look like trapunto. The closely sewn pattern tends to make it recede visually and thereby enhance its adjoining shape, as well as strengthening the quilt. The important point to remember is that the background filler must be smaller in proportion to the motif. Also allow for contrast within the quilting designs themselves – curves versus lines will always show both patterns to advantage. These patterns, along with grids, are more important in the construction of a quilt than the other motifs. The texturing group of patterns includes straight lines, diamonds, circles and basket grids.

Echo quilting is a specific form of texturing. Echoing is the use of stitching in rows, placed close together, which parallel a shape that has been pieced, appliquéd or quilted. The echoing can be inside or outside the shape. It is used to its best effect when the echoing is repeated until the desired space is filled, eventually distorting the lines somewhat. Similar to the ripples created by dropping a pebble into a pool of water, the lines distort a little more as they go away from the design. This form of quilt pattern is used with striking effect in Hawaiian appliqué quilts.

A technique known as stippling is also included in this category. Stippling is a continuous, meandering line of stitching that never crosses itself and resembles echoing except that the stitching is more random, giving a stippled or coarse grain effect. It can be very close or very large and open, according to the area to be filled. When stitched in dark thread on a light fabric, stippling creates a tone, a darker variation of the original colour. Stippling also obscures piecing lines and blends colours. Both echo and stipple quilting are stitched without marking the quilt top.

An interesting technique used in appliqué work is to add freehand drawings to fill the spaces between these patterns. Designs featuring creeping foliage, meandering vines or even replications of the subject of the appliqué work are used as an alternative to more conventional outline, echoing or motif patterns.

### *Grid Patterns*

Grid patterns (also known as crosshatching or plain quilting) involve the placing of a regular, usually geometric, pattern over all, or sections of, the quilt in a manner unrelated to any other pattern in the quilt. This technique produces uniform quilting over the patchwork, which is different in effect from outlining or texturing, and adds surface texture to strong pieced designs

without adding pattern, although its own design is an additional source of interest. A grid pattern can be placed over each block, over groups of blocks, or across the whole quilt. Some straight grids are a continuation of the piecing lines. Others of these designs introduce pleasing curves to pieced quilt tops, and soften the overall appearance.

There is a large variety of these patterns. They include diamonds, squares, double diagonal, circles, clamshell, fanning and wineglass, as well as less formal linear and curvilinear patterns. An example of the last mentioned would be the placement of a spider-web pattern over a two-by-two group of blocks and repeated in a regular fashion over the surface of the quilt.

### *Border Patterns*

These patterns (also called running or strip designs) form a pattern that flows around a quilt, along a strip or border, framing the central area and drawing the eye in. It is important to think of the quilting on borders as being similar to the gilt on a frame around a painting. The frame is important to showcase the art, but the gilt adds something special to the presentation. Popular border designs include continuous feathers, cables and scrolls. Occasionally a border consists of a single motif that repeats. Attention should be paid to the harmony of design and the balance in the amount of quilting between the border pattern and the other pattern elements in the quilt, which may be done in several ways: (i) the border design may repeat a motif or part of the design from the central area of the quilt; (ii) the border design may consist of continuous designs that relate to, but do not repeat, the central quilting design; (iii) the border design may be modified (enlarged, reduced, or be a selected part) from the central quilting design; (iv) the quilting design from the central area of the quilt may spill into the border. For a pleasing visual effect, quilting designs should fit the borders as precisely as possible. Border designs that turn the corners require careful calculations; even designs that run off the edges of the quilt, disregarding the corners, must be well planned.

### *Motifs*

Motif patterns (also called block designs or fancy quilting) are designs of specific objects, traditionally baskets of fruit, flowers, feathers, wreaths and leaves, arranged as isolated, non-interlocking items. Motif patterns, which may be geometric, representational or abstract, are usually featured within a well-defined area such as single blocks, borders or in areas in patchwork left blank. They can be fitted in around appliqué work or used to adorn any open space, filling the intended area without crowding. A motif may be drawn from any source and a single, large motif may be the central theme of the quilt. Fancy quilting is at its best when combined with lots of plain quilting, which becomes the background to the design. The motif thus highlights the dimensionality of the quilt's surface and lifts the designs up to view. The textured background quilting, especially when executed in close lines, flattens the quilt's surface, making for an almost corduroy effect. Quilting shows up better on solid fabrics than on prints, so save motif quilting for plainer fabrics.

Celebratory and politically inspired quilts may have motifs that may include the written word, perhaps in the form of a poem or song, or the faces of theme subjects.

### *Choosing Patterns*

In considering how to quilt a space, too often the quilter is influenced by the ease and speed of execution of the quilting design rather than its artistic appearance. It is a common mistake, having chosen a design, to stop there. This will frequently leave the work under-quilted. Additional quilting will very often lead to a more artistic and finished appearance.

Quilting designs are available in abundance from a number of publications. They illustrate motif as well as texturing, grid and border designs.

When the fabrics are chosen for the quilt, they should coordinate, but when selecting a quilting design it should contrast with the style of the quilt top to showcase both the top construction and the quilting. A pieced quilt with lots of little angles usually benefits from some curved-line quilting. An appliqué quilt, with curves already in the design of the quilt top, looks good with straight-line quilting. A quilt that has straight-line piecing but which stylistically produces a curved effect, such as a bargello or watercolour quilt, looks better quilted with curves that echo the waves of colour in the quilt top. Quilts with alternating plain blocks offer the opportunity for both plain quilting and fancy designs.

The use of tracing paper with a frame drawn to the size of the space to be filled can be useful at this time. By placing the paper over the pattern in the back, it can be seen how well the pattern fills the space. In many situations more patterning in the form of extra lines echoing the motif and perhaps defining the edge of the shape will produce a more pleasing effect.

Those for whom the amount of time involved in quilting is a problem might consider: (i) using machine quilting, (ii) breaking the work up into sections, (iii) setting daily and weekly goals, (iv) setting aside a quilting work area so that time is not required in setting up or tidying up at each session and (v) making sure that at least some quilting, preferably at the same time, is done each day. The extra time taken to embellish a quilt will be repaid by the satisfaction obtained at the quilt's completion, and the harder-wearing qualities obtained. One quilt of good quality will give much more pleasure than two or three quilts of ordinary finish.

Quilting design skills can be developed by studying quilts from earlier times. Unfortunately we do not have the advantage of being able to visit a Smithsonian Institute where many highly instructive examples of the quilting art are on display. However we can benefit from photographs published in the many books available and from displays at exhibitions, and there are many sites on the internet.

Close-up photographs showing the fine detail of some of these quilts illustrate the lengths to which these early quiltmakers went in providing detailed elaboration of their subjects. While it is not suggested that all quilters should try to emulate this high standard or that their quilts copy this style it does illustrate what can be achieved. A quiltmaker who displayed this style was Rose Kretsinger of Kansas (1886 – 1963), whose outstanding appliqué quilts are illustrated in *The Romance of the Patchwork Quilt*.

Much can be learned from scrutiny of quilts at local exhibitions, especially those quilts that hold individual appeal, and prize-winning quilts. Recognised local quiltmakers are usually more than happy to discuss their work and techniques.

Originality is an important characteristic for the production of interesting quilts. Ideas can be obtained from many and any sources, such as (i) architecture (masonry and ornamental details that grace our old buildings, tiling patterns, wrought iron lacework), (ii) crafts (carvings, including Maori and Pacific Island, on antique woodwork, Greek friezes and Celtic art), (iii) nature (cloud formations, the contours of the earth, ploughed paddocks, spider webs), (iv) publications (children's colouring books, greeting cards, advertisements, folk art books, cut paper designs).

### *Other Quilting Features*

#### *The Stitch*

The manual running stitch is the method favoured by the majority of quiltmakers since early times. Ideally, it is a small and even stitch such that the actual stitching is, in some cases, imperceptible in the quilt and it gives the impression of continuous lines. This may be produced as a running stitch or by "stabbing". Other forms and size of stitch might be considered to provide a special effect, such as *Sashiko*.

Using a machine for quilting can be a time-saver for many quilting projects, although the machine-produced look may not always produce an aesthetically pleasing appearance. In experienced hands, however, machine quilting can be masterful in effect; such results of machine quilting are exhibited in *Heirloom Machine Quilting* by Harriet Hargrave, and Lee Cleland's *Quilting Makes The Quilt*. To achieve a hand-quilted look by machine the use of invisible nylon thread is recommended. This thread has the ability to take on the colour of whatever fabric it is sewn to and thus effectively create the sculpture of quilting without distraction.

### *The Thread*

Quilters often give little thought to the purchase of thread, but it is very important to the longevity of a quilt. Only the highest quality should be used. It should be less strong than the fabric of the quilt top; it is possible to repair a quilting line where the thread has broken, but it is impossible to repair the fabric that has been "cut" by a thread that was stronger than the fabric. Use cotton-wrapped polyester only when using polyester blends in the quilt top and lining. Cotton fabrics require 100% cotton thread, the only exception to this being the invisible nylon used for machine quilting, or the specialty threads used randomly for embroidery effects.

Manufactured quilting thread is ideal for most hand quilting purposes. This thread is not thick, but is strong and, being waxed, it travels through the fabric easily and wears well in the quilt. Do not use waxed thread in a machine.

Silk or embroidery threads lie flatter on the surface of the fabric and leave a soft, shiny texture. These threads are often used to their best advantage in one-colour projects, such as whole cloth work. Metallic and rayon threads, even finer than manufactured quilt threads, add sparkle and shine to a quilted texture. Coarser threads, such as wool or perle cotton, can be used to special effect in some instances.

There are no specific rules in choosing the colour of thread for quilting. If large areas of solid fabric are to be quilted it is usual to use a colour of thread that matches the fabric. Choose wisely when using a contrasting colour for quilting as the contrast between that thread and the fabric will highlight any irregularities in the size of the quilt stitch or the spaces between them.

### *Battings*

Battings are often overlooked in the quilt 'recipe'. This key ingredient can either enhance a quilt's beauty or detract from and distort the quilt's surface. There is no one batting that is ideal for every quilt. Batting performs several roles – structural and functional. Quilters must consider factors such as desired surface texture, weight, warmth, loft, drape, shrinkage, fibre content, washability and wearability, bearding (or migration) properties, ease of needling or preferable for machine quilting. All battings are suitable for machine quilting, although some are easier to use than others. A variety of battings are available; each produces a different look and feel. In general, the thicker the batting, the more difficult it is to quilt. Battings also respond differently to hand and machine quilting. Most battings are made of one or a combination of three fibres: cotton, wool and polyester. The fibre content governs, to a degree, the amount of quilting necessary to hold the quilt together. Always take note of the manufacturer's recommendations on how far apart to space the quilting lines. As a general guideline it is: 100% cotton or wool batting | 1.2 – 2.5cm (½" – 1"), cotton/polyester or wool/polyester blends | 2.5 – 5cm (1" – 2"), 100% polyester | up to 10cm (4"), although closer quilting will reduce the amount of bearding. Cotton batts become softer and more supple over time but tend to weigh more; some polyester batts may lose their loft; cotton and wool batts "breathe"; polyester batts (unless treated to prevent it) may beard.

### *Supplementary Techniques*

Trapunto (also known as stuffed work) is a technique used to give emphasis to quilting designs. The top fabric, which has been marked with the pattern, is basted to an interlining material. The design is then quilted and padding is inserted from the back, making the overall appearance three-dimensional. In order for the stuffed design to show on the back of the quilt, it must be requilted after the three layers are basted.

Corded work (Italian quilting) is an attractive decorative technique requiring the addition of cording into the quilted design to raise it above the quilt's surface, thus producing a three-dimensional, bas-relief effect.

### *Summary*

Decisions about choice of quilting design should be made at the planning stage. Modern quilts commonly suffer from an inadequate amount of quilting and a lack of variety in the choice of quilting patterns. Beginning quilters should attempt to improve their quilting technique and gradually introduce more plentiful and more elaborate designs into their work. Many publications give instruction on adapting existing designs to fit. Once the design process is understood, it's not difficult to draw designs to fit a quilt top, using imagination, experimentation and creativity.

### *References*

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- (iii) Hargrave, Harriet, *Heirloom Machine Quilting*. U.S.A. C&T Publishing. 1990
- (iv) Cory, Pepper, *Mastering Quilt Marking*. U.S.A. C&T Publishing. 1999
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**Rose Kretsinger**  
United States, 1886-1963  
*Orchid Wreath* 1929  
Quilt, cotton, 2331 x 2331mm

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*Kettle Moraine Star* by Diane Gaudynski

Inspired by old Amish and Mennonite Lone Star quilts, this quilt is 90 inches square, made with Cotton Classic batt with Mountain Mist polyester batt in the trapunto. Many of the feather designs were drawn right on the quilt with blue water soluble marker, and it's quilted with nylon monofilament thread. #50 cotton thread was used in the bobbin. The star itself is quilted using the continuous curve free-motion technique to give it dimension.



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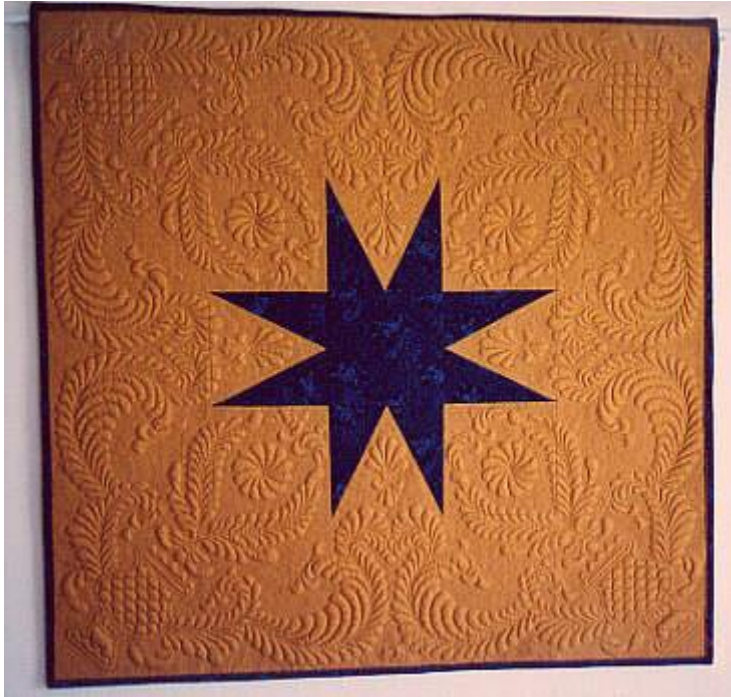


This miniature whole cloth quilt (23½" square) was made in December 2000. The design was drafted on freezer paper and transferred to the sateen fabric. The central feathered wreath and the corner fans and all the Welsh spirals were done with no markings by free hand quilting. The fill in the corner urns was also done this way.

*A Visit to Wales* by Diane Gaudynski



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*Roses in Blue* by Diane Gaudynski.

This 38" square wall quilt is based on an antique quilt that was over 100" square. Original quilting designs drawn free hand using Rose Kretsinger's beautiful "tufted" feathers as a base. The urns are a Debra Wagner appliqué pattern. Nylon monofilament thread, cotton classic batt, Cloud-lite for the trapunto. It took two weeks to draw, piece, and quilt this small piece, working several hours a day only.