

THE INFLUENCE OF HAWAII'S TROPICAL ENVIRONMENT ON HAWAIIAN QUILTING DESIGNS

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Abstract

Hawaiian quilts are generally known around the world as large floral appliqué quilts, done with one bright color against a light background. Designs are drawn from the quilter's intense involvement with the tropical environment; most are abstractions of Hawaii's variety of bold and colorful tropical flowers. The design is folded and cut (like a snowflake) from one large piece of bright plain fabric and appliquéd to a light background. Hand quilting sets off the design in rows radiating outward from the appliqué like waves of the ocean. This traditional form was set by the third quarter of the nineteenth century and continued with very little change into the latter part of the twentieth century largely because traditional designs were encoded with a complex set of rules (*kapus*) passed on within the family as girls learned to quilt from their mothers and grandmothers. The focus of this research project was to document the development of traditional Hawaiian quilting, and to explain how and why the similarity in floral designs occurred.

Key words: Hawaii, environment, quilting, floral, design

Hawaiian quilts are a stunning visual testament to the collision of the western and Polynesian worlds in the nineteenth century. These quilts directly reflect the natural world of the islands, and the culture of the varied peoples who have inhabited the Hawaiian archipelago. Hawaii's textiles, more than those of any other region, are intimately tied to their environment, and to the breathtaking beauty of the Islands. All year round, Hawai'i is filled with intense colors from the tropical plants that cover the land in what has been referred to as "Paradise". Mark Twain noted:

I spent several months in the Sandwich Islands and if I could have my way about it, I would go back there and remain the rest of my days. It is paradise ... The climate is simply delicious -- never cold at sea level and never really too warm ... the green tone of a forest washes over the edges of a broad bar of orange trees that embrace the mountain like a belt, and it's so deep and dark a green that distance makes it black. ... You will note the kinds and colors of all the vegetation, just with a glance of the eye (1893).

Mark Twain was just one of the many celebrated visitors who referred to Hawai'i as a paradise. Most people have been thrilled by the wonderful climate and the riot of color seen in the

flowering trees and other vegetation found throughout the Hawaiian Islands. These things have not changed since Twain's visit over a century ago.

The introduction of woven fabric, western styled clothing and sewing lessons, in combination with the unique environment and flowers of the Islands, led to the creation of Hawaiian quilts. Quilt designs incorporate and reflect personal expressions of beauty, memories shared and recorded, and events commemorated and preserved. To appreciate the Hawaiian quilt, it is necessary to investigate the evolution of Hawaiian quilting, to understand the interrelationship between the physical and cultural environments.

This paper is part of a much larger study (done between 1998 and 2002) on the history and evolution of the Hawaiian quilt into two forms; the Traditional Hawaiian Quilt and the Contemporary Hawaiian Quilt. Methods used were both qualitative and quantitative and resulted in a book detailing the development of contemporary Hawaiian quilting as a result of ethnic shifts in the state (Arthur, 2003). The subject of ethnicity is pertinent as Hawai'i is a state with no ethnic majority; not surprisingly quilters in Hawai'i represent a variety of ethnicities. For the project that resulted in this paper, interviews were conducted with twenty women who quilted in both the traditional Hawaiian and contemporary Hawaiian styles. The majority of these quilters had lived in Hawaii most of their lives, and came from the islands of Oahu, Molokai, Maui, Hawaii, and Kauai. Their quilts were studied and photo-documented following the interviews.

A BIT OF HISTORY

The Hawaiian Islands are 2400 miles from the nearest continent, and the most remote group of islands in the world. Before human habitation of the Islands, Hawaii's extreme isolation and lush tropical climate helped to create a unique natural world full of colorful trees and flowers some of which are found nowhere else on earth. Similarly, the remote location fostered cultural isolation as well. The Hawaiian Islands, the last to be colonized by Polynesians, were settled around 400 AD by people from the Marquesas Islands (2400 miles away). Polynesian plants and culture arrived on fertile soil when the Marqessans relocated to Hawai'i. For the next 1300 years, the Hawaiian Islands were unknown to both the western and Asian worlds (Buck, 1964). During this time, a rich Hawaiian culture evolved.

Before western contact, Hawaii's natural environment provided materials for fabric. Throughout Polynesia, a non-woven fabric called *tapa* (*kapa* in Hawai'i) was made by felting fibers from the inner bark of the paper mulberry tree (Kaepler, 1975). *Kapa* was used for clothing, bedding (*kapa moe*), and other utilitarian and ceremonial purposes. Most *kapa* was made from the inner bark of the *wauke* plant (*Broussonetia papyrifera*, or paper mulberry) because it made soft, white *kapa*. To make *kapa*, Hawaiian women used wooden mallets to pound the strips of bark together to form sheets of various sizes, textures, and thicknesses. The *kapa* sheets were then decorated with bamboo stamps and painted with brushes made from the seed OF the hala (*pandanus*) tree; *kapa* was colored by native dyes and decorated with block printing, a technique not found elsewhere in Polynesia (Buck, 1964; Kaepler, 1975; Mitchell, 1992). For bed covers, Hawaiian women made *Kapa moe* consisting of five sheets of *kapa*. The top sheet was decorated, but the four sheets underneath were plain white *kapa*. The set of five sheets were sewn together on one side with thread made with strips of *kapa*. Awls of bone

or hardwood were used to pierce the holes needed for the needles made of hardwood (Mitchell, 1992).

With the discovery of the Hawaiian Islands by Captain James Cook in 1778, Hawai'i became a port used by sailors for acquiring supplies, and for wintering their ships. Sandalwood trade developed. This interaction between Hawaiians and outsiders stimulated the native Hawaiians in the development of new techniques and designs. Similarly, they examined and then creatively adapted western designs. Woven fabric was introduced during this time as calicoes, chintzes, and silks (from China) increasingly became available through the trade with seafaring merchants from Asia and the West (Kuykendall, 1996; Arthur, 2000). The imported fabrics apparently provided inspiration for the *kapa* makers as the design details on the *kapa* began to imitate the patterns found in the woven fabrics. Hawaiians began to rapidly assimilate foreign elements into their culture, for example Hawaiian craftsmen found that newly introduced metal tools worked well with traditional techniques. The result was that the material culture of the Hawaiians soon became increasingly detailed in terms of designs and motifs (Wild, 1989).

ORIGIN OF HAWAIIAN QUILTING

To date, scholars have been unable to find definitive proof of the initial development of Hawaiian appliqué quilting. We do know that the wives of American missionaries introduced the patchwork quilts and their construction to Hawaiians. The first missionary women arrived in 1820, and were warmly welcomed by some of the highest-ranking Hawaiian men and women. Lucy Thurston, the wife of one of the first missionaries, recorded in her journal (1882):

Monday morning, April 3rd [1820], the first sewing circle was formed that the sun ever looked down upon in his Hawaiian realm. Kalakua, queen-dowager was directress. She requested all the seven white ladies to take seats with them on mats, on the deck of the *Thaddeus*. Mrs. Holman and Mrs. Ruggles were executive officers to ply the scissors and prepare the work... The four native women of distinction were furnished with calico patchwork to sew-a new employment to them.

For the first few years the missionary wives spent a great deal of time sewing for the upper class Hawaiians. These ladies preferred to spend their time instructing the Hawaiians in spiritual matters and when regular supplies of fabric and patterns arrived from the mainland, the missionary wives began teaching Hawaiians to sew in the 1830s (Dibble, 1883). According to Wild, the missionaries' instructional program included other domestic arts in addition to sewing lessons, and both sexes were welcomed into the domestic arts classes. Leftover scraps of fabrics from the lessons were used to teach patchwork quilting. As they began learning to quilt, Hawaiian women incorporated traditional and familiar *kapa* designs into their quilts. As part of the assimilation and acculturation processes, western fabric, fashions and quiltmaking were integrated into Hawaiian material culture. As this happened, the making of *kapa* began to decline, and by the end of the nineteenth century, *kapa* production waned (Wild, 1989).

To the Hawaiian seamstresses, it probably seemed illogical to cut new materials into small pieces only to be sewn together to make a patchwork quilt. It was quite natural, therefore, that the Hawaiian women would move toward individual designs as they were accustomed to

producing original designs with their own kapa beater and wood-blocks from which they made *kapa* designs of their own (Jones [1930],1973).

It is not known exactly when, or even how the appliquéd Hawaiian quilt evolved. What is most striking about the Hawaiian quilt is the appliqué technique in which a large sheet of fabric is folded, cut into a design, then stitched onto a contrasting background, followed by contour quilting around the motif. Both in technique and style, Hawaiian appliqué reminds us of paper snowflakes made by schoolchildren, a contemporary remnant of cut paper work that was popular in the northeastern United States during the early decades of the nineteenth century. Many Pennsylvania Germans practiced *scherenschnitte*, a form of decorative folded paper cutting. Similar cut paper designs were executed by New England schoolgirls, who crafted pictures with their scissors. Although no documentary evidence has been found to confirm the theory, paper cutting may have been introduced to Hawai'i by missionary women who came from New England. These designs were produced by cutting multiple layers of folded materials to produce a symmetrical design, and like Hawaiian appliqués, the designs of cut paper pieces were most often based on floral forms (Shaw, 1996).

The quilts from the continental US that most closely approximate Hawaiian quilts are Pennsylvania Dutch in origin. These quilts often consist of a central medallion appliqué that resembles the Hawaiian technique, or repeats the same floral design in four large blocks. The Honolulu Academy of Arts has a *scherenschnitte* quilt in their collection, made between 1860-1870, which lends some credibility to the idea that this style of quilt was known in the Islands by the late nineteenth century (Shaw, 1996). However, all theories regarding the origin of the Hawaiian appliquéd quilt are conjecture at this point. A great deal of historical research will be required to definitively determine the origin of this technique. It may be safe to say that the Hawaiian appliqué quilt probably represents the Hawaiian modification of western appliqué quilts. There are indications that the aura of prestige and wealth associated with the less common western appliqué quilt may have influenced the Hawaiians in their selection of a quilt style to emulate. Although the method of cutting an overall design from a single piece of fabric is unique to Polynesia, the Hawaiians may have developed their technique after seeing small western appliqué designs created in a similar manner (Hammond, 1986). Perhaps we shall never know exactly how or when this distinctive art form originated. Hawaiian quilts nevertheless resulted from the successful integration of styles and techniques from diverse cultures.

CATEGORIES OF HAWAIIAN QUILTS

Before the mid-twentieth century, Hawaiian quilts came in many forms. Today there are two major categories of Hawaiian quilts; traditional and contemporary. Traditional Hawaiian quilts have very distinctive characteristics. Traditional Hawaiian quilts are generally large, square bed covers. The traditional appliqué quilts feature a large symmetrical design appliquéd in one piece onto a lighter colored background. The appliqué design is often inspired by Hawaiian flowers or environment, or a meaningful life-event. Echo quilting is done by hand with white thread in rows that radiate out from the appliqué design. The presence of these characteristics classify a Hawaiian quilt in the traditional category. Traditional Hawaiian quilts include the famous appliqué quilts, as well as patchwork and embroidery quilts (such as redwork embroidery). Perhaps the most beloved is the *Ku'u Hae Aloha* (My Beloved Flag) that depicts

the flag of the Hawaiian Kingdom. After Queen Lili'uokalani was deposed in 1893, the flag quilt became increasingly popular.

Traditional Hawaiian appliqué quilts are easy to recognize because of the remarkable similarities between them. Such consistency occurred due to the methods of instruction used in teaching Hawaiian quilting until the mid twentieth century. Before statehood in 1959, women in Hawai'i, regardless of ethnicity, learned to quilt within the family, from their mothers, aunts and grandmothers. Hawaiian culture prescribed and proscribed numerous practices through rules called *kapus* that restricted innovation and preserved the traditional form.

The post-World War Two period was a time of rapid transition, especially following statehood in 1959, as a surge of mainland Caucasians moved to Hawai'i. Hawaiian arts and crafts were enthusiastically embraced by the newcomers. The new immigrants were intrigued by Hawaiian quilts but because they were not bound by traditional practices, many of which included *kapus*, these quilters felt free to experiment with their art. By doing so, they moved Hawaiian quilting into a contemporary realm. First, though, they began with the basics; they learned the traditional Hawaiian quilting techniques, patterns and styles. While traditional Hawaiian quilting instruction stayed in the homes of local born women, the newcomers began taking quilting classes where traditional Hawaiian quilting was taught, along with other forms of quilting, and innovation was celebrated. As a result of this shift in instructional practices and the influence of newcomers to Hawai'i, evolution into a new form of Hawaiian quilting occurred.

While traditional Hawaiian quilts are used as bed covers, and contemporary Hawaiian quilts may be used in that way, most of the contemporary works are smaller and are a form of fiber art, used as wall hangings. Contemporary Hawaiian quilts generally have a tropical or Hawaiian theme, bold colors and appliqué. Most of the work is done by machine, rather than by hand. Contemporary Hawaiian quilts can be seen on a continuum from quasi-traditional Hawaiian appliqué style through a wide range of contemporary art quilt forms that are more art than quilt. The contemporary Hawaiian quilt is focused on making a dramatic visual statement about Hawai'i. The quilts are often realistic and pictorial, more like an artistic canvas in which the viewer can understand what the designer intended.

MAKING THE HAWAIIAN QUILT

Hawaiian quilting is a long and intricate process, requiring a year or even more for completion. It has been suggested that Hawaii's mild climate allowed this leisurely form of artistic expression rather than the utilitarian necessity of warding off bitter cold winter weather, as the missionaries were accustomed to in New England (Root, 1989).

Hawaiian quilt making followed certain progressive steps. A bright solid color was usually chosen for the appliquéd design and sheeting or seamed muslin, percale or broadcloth were used for the background. In the early 1800s, turkey red was the most common western trade fabric available in Hawai'i and many early quilts incorporated a red-on-white color scheme. New fabrics such as chintzes, calicoes, and dotted swiss, were incorporated into this evolving folk art form. Calico is sometimes seen in the older quilts. The calico was lining cloth from England, and when the Hawaiians saw the English ships coming into Towpath Road (now named Richards Street, in Honolulu), they would rush down to buy bolts of the fabric. They would put their hands on their chosen bolt, saying "*paupauaho*", which meant all out of breath in Hawaiian. The fabric was given this name (Faye & Lovett, 1991).

Prior to quilt construction, fabrics were washed to ensure fastness of color. In early times, this task often was relegated to children who took the fabric to the shore and rinsed it in the ocean. If the piece of fabric chosen for the appliqué was not large enough to cut without a seam, pieces would be joined lengthwise. The appliqué fabric was folded into eighths, and then the border and the center designs were cut. While some quilters preferred a quarter fold, others used the more traditional eighths, and yet in other cases the central design consisted of four or more separate pieces placed symmetrically around the quilt's center. Because individuality was highly valued, the designer was not limited to such options and many variations arose (Wild, 1989).

Similar to methods used in quilting bees on the US mainland, several women would baste the cut design to the top sheet, starting at the center and working outward to the edges. Generally however, the actual appliqué work was done only by the owner of the quilt. Although the stitching used for the appliqué work was usually an overcast stitch, other types of stitching were also used. Also, like the mainland quilts, batting was inserted between the top sheet and the fabric backing. However a wide variety of fill materials were used in Hawai'i, including wool, cotton and soft fibers from tree fern (*pulu*). As the three layers were stitched together, the quilters started in the quilt's center and worked toward the edges. Quilting frames were set close to the ground so that the quilters could sit on their hand-woven *lauhala* mats. As Wild (1989) notes:

The first quilting styles—parallel, circular, or diagonal lines—were those taught by the missionaries. Eventually the Hawaiians incorporated stitching styles inspired by their own traditional crafts, such as the woven pattern of their mats, *kapa* designs, and motifs taken from nature, including shells, fish scales, and turtle shells. Some of these quilting styles are believed to be uniquely Hawaiian. From this point, the quilting form evolved into what is now regarded as the traditional Hawaiian technique: stitching that parallels the inner and outer edges of the appliquéd design. This type of contour quilting, also known as echo quilting—called *kuiki lau* in Hawaiian—gives a three-dimensional quality to a quilt, a quality often described as resembling the waves in the ocean. Such wavelike rows of quilting (ideally measuring half an inch apart) give life to the piece and create a complementary motif.

HAWAIIAN QUILT DESIGNS

The Hawaiian quilt pattern is usually an allegorical theme, subtly expressed. Often, there is not a clear connection between the actual design and the theme. At other times, the design is a reproduction of an object that strikes the fancy of the designer. Hawaiian women drew heavily on the garden and nature for design and floral designs are often abstract representations of flowers found on trees, shrubs and plants. Early appliqué designs tended to be fairly simple with much of the background fabric remaining visible, but the designs became progressively bolder and more complex by the end of the nineteenth century. Early designs echoed patterns on *kapa*, but they gradually moved toward capturing the beauty of plant life and Hawaiian history. Designs inspired by nature were probably the first and most frequently used. Quilters of each of the islands selected their own island's flowers to be incorporated into their quilts. When new plants were introduced into Hawai'i, their flowers were represented in quilt designs.

Wild (1989) noted that over the years some of the designs and their names have been lost, but that there is often a theme that can lead to an understanding of the quilt origins. For example, the design generically known as *Ka u'i o Maui* (The Beauty of Maui) has also been named *Lei Roselani* (Heavenly Rose Lei), as the rose is symbolic of the island of Maui. Similarly, *Noho o Pi'ilani* refers to the royal Pi'ilani family of Maui, and *Piko o Haleakala* and *Kahului Breakwater* relate to geographic features of the island of Maui.

From these examples it is inferred that the design originated on the Island of Maui. However, a few quilt makers had no reason to refer to Maui when naming their quilts of this design. This the design has also been called Helene's Lei, The Pearl of 'Ewa (on O'ahu), and the Edge of the Rainbow. In most cases, the oldest designs have the most variations and a great variety of names (Wild, 1989; Arthur, 2003).



Figure 1. Rose. “**Lei Roselani**”. 62” x 62”. Design, appliqué and quilting by Dianna Grundhauser, a Caucasian quilter, using dimensional rose designs by Elly Sienkiewicz. The quilt shows traditional Hawaiian styling, but uses contemporary techniques such as bold colors and fabrics, and three-dimensional roses. Photo by Linda Boynton Arthur.

The inspiration for a particular design was not always reflected in the name given by the quilter. Sometimes, the meanings were so personal to the quilter that they remain a secret known only to the creator (Jones, [1930],1973). Some quilts have a meaning expressed with Hawaiian subtlety, some are allegorical, and yet quite a few Hawaiian quilts have a *kaona* , a completely private meaning (Wild, 1989).

In old Hawai`i, a designer's originality was highly valued and a code of ethics arose to protect designs; they were considered to be the exclusive property of the owner, and copying was not to be done without permission. Many quilts were hung on clotheslines with the appliqué side in, so as to prevent the possibility of someone copying the design (Stewart, 1986, citing Jones [1930], 1973). Although many quilt makers guarded their designs jealously, still others freely shared their patterns as a mark of friendship. A woman who shared would often do so with the understanding that every quilt made from her pattern would carry the name she had given to it (Barrere, 1965, citing Jones [1930], 1973). Others shared their patterns with the understanding that the name of the quilt *per se* would be changed (Akana, 1981). Today, some quilters share a design with the expectation that the new owner would change it to please herself and give it a new name (Kalama, cited in Tibbetts and Zinn, 1986). Jealously guarded designs were rarely copied without permission of the owner for fear of embarrassment or shame should the "theft" be discovered (Rose, 1980, citing Jones [1930], 1973). As a result of these traditions, many variations and names for a basic Hawaiian quilt design may be found today.

The design of Hawaiian quilts as a traditional art form was set by the third quarter of the nineteenth century and continued with very little change into the latter part of the twentieth century. The focus of traditional Hawaiian quilts on floral designs derived largely because traditional designs were encoded with a complex set of rules (*kapus*) passed on within the family as girls learned to quilt from their mothers and grandmothers. One of the more salient *kapus* prohibited quilters from drawing designs based on people and animals as it was believed that these living beings had *mana* (spirit) and that the power derived from *mana* could be altered and used against the person sleeping under the quilt. Consequently, and by default, the vast majority of Hawaiian quilts made before Hawai`i became a state (1959) are of floral designs.

At the time of statehood, Hawai`i went through a great deal of westernization and leisure time activities changed. Hawaiian art forms and cultural activities revived during the Hawaiian Renaissance which began in the 1960s (Bento, cited in Brandon and Woodard, 2005). Hawaiian quilt making became popular again and is now practiced with renewed enthusiasm and astounding creativity. There are now two forms of Hawaiian quilts, traditional Hawaiian quilts and contemporary Hawaiian quilts that draw inspiration from the traditional form. An essential difference is that while most of the traditional Hawaiian quilters keep the *kapus* (and are ethnically Hawaiian), quilters involved in contemporary Hawaiian quilting are not bound by *kapus* as they come from other ethnic origins, or, if Hawaiian, no longer believe in the *kapus*. While traditional Hawaiian quilts still focus almost entirely on floral designs, contemporary Hawaiian quilts use many other forms of subject matter for design inspiration. New designs are created to memorialize current events, record newly introduced plants, and preserve special memories. Old designs are still used, incorporating subtle alterations that enhance the beauty of each piece, and patterns are shared with warmth and friendship. There are many quilting classes and clubs, there is a thriving commercial pattern industry, and Hawaiian quilts are prominently displayed in museums throughout the state (Wild, 1989; Arthur, 2003).

HAWAII'S TROPICAL FLOWERS AS DESIGN INSPIRATION

Hawaiian art often has connections to Hawaiian history and legends. A famous legend for quilters relates to the importance of the *ulu* (breadfruit). In this legend, Pele, the volcano goddess, became angry with King Kamehameha because his offerings had not been generous

enough, and she destroyed his grove of 'ulu (breadfruit) trees. Another notes that Niheu, a hero who displeased the gods by being mischievous and too enterprising, especially angered them by stealing a breadfruit that one of them used to roll thunder across the floor of the underworld (Neal, 1965). A story is told of a woman drying her *kapa* bed coverings under an *ulu* tree. When the sun cast the shadow of the leaves on the covering, it was so attractive that she traced the shadow and made it into a quilt pattern. It is said that if the first quilt a woman makes is of the 'ulu, just as it is a prolific plant, so too will be the quilter and she will go on to make many quilts for her family. This final legend is often repeated for an explanation as to why the first quilt Hawaiian women make is that of the Breadfruit pattern.

'ULU QUILT DESIGNS



Figure 2. Breadfruit. "Ulu". 56" x 84". Design, appliqué and quilting by Lila Robinson, an island-born Caucasian, in the 1930s. . Photo by Linda Boynton Arthur.

The 'ulu (breadfruit) quilt (see Figure 2) was made by Lila Robinson, who was born into a prominent Caucasian family on Oahu. Her descendent Margo Morgan owned it for many years, and stated that this traditional 'ulu design was altered to be rectangular in order to fit a single bed. (Mrs. Morgan recently donated the quilt to the Mission Houses Museum in Honolulu).

The 'ulu (breadfruit-*Artocarpus communis*, *Artocarpus altilis*) was brought to Hawai'i by early Polynesians. It is a tall tree (30 to 60 feet), with a trunk diameter of up to two feet. Leaves on the 'ulu are huge, dull green, and deeply lobed. When ripe, the fruit is five to eight inches in diameter, and weighs up to ten pounds. Breadfruit played an important role in daily Hawaiian life, providing shade, food, and wood for drums (*pahu*), surfboards, and canoe parts (Neal, 1965).

For Hawaiian quilters, the breadfruit pattern is one of the oldest and most popular, as it symbolizes abundant growth, food, and wisdom (Faye, 1991). Hawaiian custom said that if your first quilt was an *ulu* design, your house would always be filled with food. Hawaiian quilt teacher Luika Kamaka said that D.U. Kakalia, a well-known Hawaiian quilter of the 1970s, was reputed to have said “to make an *ulu* motif means that you will always make another” (Kamaka, 2001).

POINSETTIA QUILT DESIGNS

The poinsettia has inspired many quilt motifs in Hawai’i, because of its abundance in the Islands, and its bright red color. The poinsettia (*Euphorbia pulcherrima* syn, *Poinsettia pulcherrima*) is a native of Mexico and Guatemala. In Hawai’i, it blooms from November through March, and is grown in the landscape as a hedge or foundation planting on all islands. At Christmas time, potted temperate climate hothouse varieties are popular in Hawai’i. In nature, the plant is a shrub up to twenty feet high, with rich green long-stemmed leaves from three to seven inches long. The brightly colored red, pink, or cream-colored top portion of the stem is actually leaves, rather than flowers. The flower of the Poinsettia is small and



inconspicuous, and the color is greenish with a yellow gland. The flower forms in clusters at the center of the top leaves (bracts) (Neal, 1965).

Hawaiians were known to have extensive botanical knowledge of tropical plants and they used the plants in Hawai’i for medicinal use. The poinsettia was one such useful flower. The leaves, bark, and bracts are used medicinally, and American Indians are believed to have used the white, milky juice as a depilatory. However, the juice may be poisonous to some, and care should be taken to avoid prolonged contact (Neal, 1965).

Figure 3. Poinsettia. “**Mele Kalikimaka**”. 108” x 90”. Design, appliqué and quilting by Charlene Hughes. Photo by Linda Boynton Arthur.

Charlene Hughes is a Caucasian quilter who learned Hawaiian quilting after moving to Maui in the 1970s. Her quilt, entitled “*Mele Kalikimaka*” (Merry Christmas) incorporates contemporary techniques, colors and fabrics into a traditional Hawaiian design. In describing this quilt, Ms. Hughes wrote:

Although this plant is not native to Hawai’i, it blooms here, easily and wildly. Every fall and winter these plants bloom outside my windows. They cannot help but catch your eye -- they are so flamboyant and prolific -- they dazzle the eye and celebrate life. This quilt uses a contemporary form of Hawaiian appliqué. While most of the Hawaiian quilts made at this time (1990s) were done with one bright color against a light background, I designed this poinsettia quilt with multiple colors to closely resemble the poinsettia plant. I used multiple shades of red, and several other colors; it was a little ahead of its time. This quilt features deep red poinsettias with green leaves on white background, hand appliqué and echo quilting.

ANTHURIUM QUILT DESIGNS

The anthurium, another common Hawaiian flower, has inspired many quilts. The anthurium species known in Hawai’i probably originated in tropical Central or South America. The anthurium is in the same family as the monstera (swiss-cheese plant) and taro, the root of which Hawaiians use to make *poi*.



Cultivated varieties of the anthurium have been produced by selecting and hybridization on a large-scale basis, and many are highly prized and extremely expensive specimens. Most well known species are cultivated plants that appear as a handful of leaves rising from an underground stem. Leaves of the anthurium are long-stemmed, with heart-shaped blades. From the leaf base emerges a long stem, topped with a shiny and brightly colored structure called a bract. Many anthuriums have red, heart-shaped bracts, but pink, purple, white, and mottled species have now been cultivated. The actual flower is found on the long spike (spath) that emerges from the connection point of the bract. The many small raised dots are actually individual flowers. If the spike is pollinated, berries may develop, causing a warty appearance. Anthurium flowers will last for months on the plant, and are favored as cut flowers, as they will last for weeks in water. Their shiny, perfect appearance is often mistaken for artificial flowers (Neal, 1965).

Figure 4. Anthurium. “**Asian Anthuriums**”, 12” x 60”. A contemporary Hawaiian quilt incorporating unique colors, fabrics and three-dimensional flowers. Design, appliqué and quilting by Hawaiian quilter, Mary Haunani Cesar. Photo by Linda Boynton Arthur.

Mary Haunani Cesar is ethnically Hawaiian; she enjoys making both traditional and contemporary Hawaiian quilts. In the quilt seen in Figure 4, Ms. Cesar used a very modern design with contemporary techniques (three-dimensional flowers, unusual fabrics and colors) but used traditional Hawaiian quilting techniques. She wrote:

Made with over 20 different hand-dyed cotton fabrics, this quilt incorporates hand and machine quilting with hand appliqué in three-dimensional anthurium flowers that were applied to a quilted "vine". The measurements of this quilt were directly taken from an old Japanese painted scroll.

WOODROSE QUILT DESIGNS

Woodrose vines are not considered a flower, but rather a problem in Hawai'i. Because they crowd out other plants nearby, and overtake nearby vegetation, horticulturalists in Hawai'i refer to them as an invasive species. Woodrose are rather attractive, and look like wooden roses so are quite commonly used by florists in floral design and by other designers as inspiration for other design forms. Quilters also use the woodrose for design inspiration in quilts. Woodrose designs take their inspiration not from the leafy vine, but from the woody seedpod, that somewhat resembles a rose.



Figure 5. **Woodrose**. 44" x 44". Design, appliqué and quilting by Hawaiian quilter Mary Haunani Cesar. Photo by Linda Boynton Arthur.

Woodrose (*Ipomea tuberosa* syn. *Operculina tuberosa*), from Latin America, is known as *pili-kai* in Hawaiian. *Pili* is "to cling, touch, stick to", and *kai* means ocean. The woodrose is a

ining plant that is a member of the morning glory family. It has an attractive two-inch long, yellow-orange tubular flowers, and is grown ornamentally in Hawai'i for its dry, brown, rose-shaped fruit. Woodrose fruit is used extensively in dried flower arrangements and wreaths.

While some in Hawaii see it as a nuisance, the Hawaiian fiber artist Mary Haunani Cesar saw the nobility of the plant and created the design in a traditional Hawaiian style, and with Hawaiian echo quilting. However Ms. Cesar gave it a contemporary spin with the unique colors, fabrics, and small size. The woodrose quilt (see figure 5) was made with hand dyed cotton fabrics, and techniques included both appliqué and machine quilting. The artist stated, "This pattern was designed to get the full impact of the dyed fabric. I love the effects this fabric adds to contemporary Hawaiian quilt designs." (Cesar, 2001).

CANDLENUT (or KUKUI) QUILT DESIGNS

Hand-dyed cotton fabrics, appliqué and quilting were again used by Ms. Cesar to create *Malamalama*, a quilt with some similarities to *Woodrose*. Mary Haunani Cesar blended traditional Hawaiian style and quilting with contemporary quilting techniques (unique colors and hand-dyed fabrics with a spot of light in the center, the *piko*, in *Malamalama* (see Figure 6). The design in Figure 6 is of the *kukui*, or candlenut, which provided pre-contact Hawaiians with oil for light. In the Hawaiian language, *Malamalama* means "light of knowledge".



Figure 6. Candlenut. "**Malamalama**". 22" x 22". Design, appliqué and quilting by Mary Haunani Cesar. Photo by Linda Boynton Arthur)

The *kukui* tree is the state tree of Hawai'i, so recognized for its widespread use by Hawaiians as dye, fuel, light and medicine (Neal, 1965). Legend has it that, when Makali'i, god

of plenty, could not see the shark that had swallowed his brother, he chewed some *kukui* nut, spat it onto the water, and the water cleared. The oil of the *kukui* was used by Hawaiian fishermen and divers when underwater; they would chew the *kukui* nut and spit the oil out in front of them so they could see more clearly underwater. A Hawaiian proverb says, “When the *kukui* nut is spat on the water, the sea is smooth”—perhaps this is similar to the concept of “pouring oil on troubled waters”.

The design in the *Malamalama* quilt (see Figure 6) is allegorical, and depicts the *kukui*, or candlenut tree (*Aleurites moluccana*). The *kukui* is a large tree found all throughout the islands of Hawai‘i. It is easily recognized in lower mountain ranges, because its leaves are pale and silvery (*Aleurites*, from the Greek, means “flowery”). Leaves are covered with a whitish down, and may resemble a maple leaf with a long stem. Flowers are small and whitish, and are strung with the leaves for lei in Molokai, whose color is silvery green. *Kukui* nuts are walnut-like, with hard black shells, and are found one or two to a fruit. Fruits are green turning to brown, fleshy but strong. Nuts are strung into lei and used ornamentally.

In Hawaiian, “*malamalama*” refers to lamp or light. In addition to burning the nuts themselves, the oily kernel of the *kukui* was dried and strung on coconut leaf midribs to be used as candles, and the oil was extracted and burned in stone lamps (Neal, 1965). *Malamalama* can be expanded to mean clear, bright, shining, the light of knowledge. The fabric for this quilt was intentionally dyed with light spot in the center (*piko*) to create an effect of light in the center. The *piko*, as well as the appliquéd motif, suggest light in many ways.

CARNATION QUILT DESIGNS

A very common floral quilt motif in Hawai‘i is that of the carnation, and there are many varieties of carnation-style quilt patterns in the Islands. The spicy-scented carnation (*Dianthus caryophyllus*), is known as the *poni-mo‘i* in Hawaiian. *Poni* means to crown, and *mo‘i* means a king, so combined the meaning is coronation, which is thought to have developed due to a misunderstanding of pronunciation. The carnation is a native herb of the Mediterranean, and was introduced relatively recently to the Hawaiian Islands. It is often used for lei and bouquets. The toothed edges of the petals are easily distinguishable as a quilt appliqué (Brandon, 1989; Neal, 1965).

In both design and coloration, the Pua Carnation quilt design is a very traditional Hawaiian quilt, and it is similar to the *Mokihana*, which is produced on the island of Kauai. The flowers are different, however, and though the quilt in Figure 7 looks like *Mokihana*, it is actually a variation of the carnation. The shade of green used for the appliqué is very typical of the 1930s quilts produced in Hawai‘i, as is the use of echo quilting and a wool batting found in this quilt. Although it has been conjectured that this quilt might have been produced on one of the islands where it can get cold, such as the Big Island (Hawai‘i) where there are elevations of over 2500 feet, it is hard to pinpoint where this quilt was made as wool batting was commonly available, and used throughout the Hawaiian islands.



Figure 7. Carnation. **“Pua Carnation”**. 86” x 98”. Design, appliqué and quilting by unknown quilter. Photo by Linda Boynton Arthur)

BOMBAX QUILT DESIGNS

The Bombax tree (*Bombax ellipticum*), a native to Mexico, grows on the island of Oahu. One of the more stunning trees on the island grows in the central courtyard of Queen’s Hospital in Honolulu. The tree loses all of its leaves, and then flowers from January to May, before leafing out begins. It is said that the buds open with a slightly explosive sound. The flowers are large, with 3-5 inch petals, purple on the outside, and downy-white inside. The curl back to expose many long, pink stamens, joined at the base, giving the appearance of a bright pom-pom or shaving brush.

The Bombax quilt was designed by Margo Morgan, a quilter born in Hawai’i to a prominent Caucasian family. She became a prolific quilter who preferred traditional Hawaiian quilts in style and technique. Traditional Hawaiian appliqué quilts feature a floral design that covers the whole quilt top. The Bombax quilt was a departure for Ms. Morgan in that while the design of the floral motif is traditional, rather than one large floral motif, there are 16 identical appliquéd quilt blocks set with sashing into a block format that is more commonly found in the mainland US.

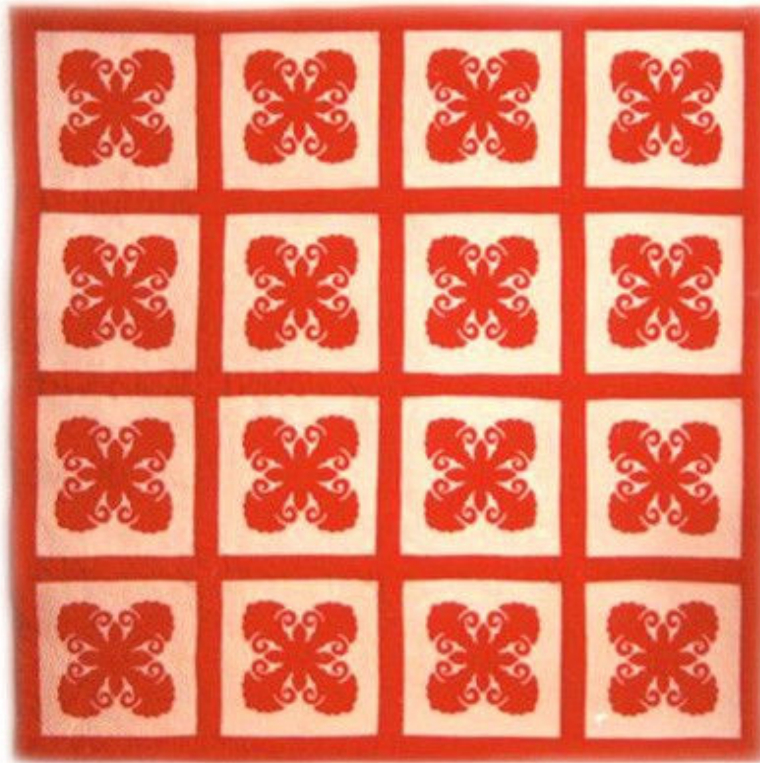


Figure 8. **Bombax**. 87" x 87". Constructed and quilted by Margo Morgan. Commercial pattern by Kaiki. Quilted by Margo Morgan. Photo by Linda Boynton Arthur).

FUCHSIA QUILT DESIGNS

The species *Fuchsia magellanica*, known in Hawaiian as *kulapepeiao* (earring flower), is an ornamental shrub from South America. It has narrow, ovate, toothed leaves one to two inches long, and boldly colored in red and blue. The fruit is a red, edible (but unpalatable) berry. Fuchsias grow well in the hot and humid climate of Hawai`i and although they were brought in as ornamental plants for landscaping, this species has escaped from cultivation on the Big Island of Hawai`i and can be seen in areas such as along roads near the town of Volcano, and its surrounding areas on the roads to the Kilauea Volcano.

The fuchsia quilt seen here is very typical of a traditional Hawaiian quilt. Because the fuchsia is so boldly colored, it is a good flower to use for a quilt pattern.



Figure 9. **Fuchsia**. 77" x 87". Design, appliqué and quilting by unknown quilter in the 1930s; owned by Bob Lee. Photo by Linda Boynton Arthur)

In this quilt (see Figure 9) the fuchsia is presented as a relatively calm pink on white. In this case, the date of the quilt (1930s) is relevant as the combination of pink on white in solid plain-weave cottons were all the rage in the 1930s. This quilt features whipstitched appliqué. White thread throughout is used on the contour quilting of eight stitches per inch, rows 1/2" apart. Binding 1/2" wide, cut on grain, overcast to front, machine stitched to back, straight machine stitch (vs. chain stitch). This lightweight quilt was used well in hot Hawaii, and the batting, while thin to begin with, is even thinner now after many years of use. Bob Lee, born in Hawai'i and a quilt collector of Hawaiian quilts, owns this quilt (figure 9) and the one in Figure 10; said:

Being a beginner, I did not realize how lucky I was to get these two quilts. They stirred my inner being and although I did not know it at the time, were bargains that fitted my pocketbook. They were in good condition and showed great craftsmanship. They set my standards. Perhaps they were unrealistic standards for a new collector on a limited budget. (Bob Lee, 2000).

HIBISCUS QUILT DESIGNS

There are 1,000 species of herbs and trees in the hibiscus family, from temperate and tropical regions of the world. In Hawai'i, over 33 varieties of hibiscus have been brought from other countries, and by crossing with one another and three native species, more than 5,000 varieties have been produced. One of the loveliest native species, *Hibiscus arnottianus*, is known as *koki'o-ke'oke'o* in Hawaiian. It grows wild at altitudes between 1,000 and 3,000 feet, and is a small tree or tall shrub, 10 to 25 feet high. Its leaves are round or lobed, with red veins and stems. Flowers have delicate white petals three to four inches long surrounding a conspicuous red or white staminal column four to six inches long. Unlike many hibiscus, *koki'o* has an exquisite, delicate fragrance, and flowers last for two days rather than one. There is also a native yellow hibiscus (*Hibiscus brackenridgei*) known as *ma'o-hau-hele*, a red native (*Hibiscus kokio*) known as *koki'o-'ula'ula*, and a pink (*H. youngianus*), known as *hau-hele*. The yellow native hibiscus is Hawaii's state flower.



Figure 10. Hibiscus. “**Island Song**”. 76” x 89”. Design by Juneal Darlene Tom; appliqué and quilting by unknown quilter in the 1960s; owned by Bob Lee. Photo by Linda Boynton Arthur)

This unusual quilt (see Figure 10) features the native Hawaiian hibiscus. Red appliqué is blind stitched to white cotton percales. Quilting is done with six to eight stitches per inch. The batting may be polyester, a fill material that became common in the 1960s. Light blue dots

defining quilting pattern are still visible on close inspection. This hibiscus quilt ("Island Song"), is a transition quilt as it is an early kit quilt for Hawaiian quilts. (Bucilla pattern no. 8099) Juneal Darlene Tom (a famous quilter in Hawai'i, now deceased) designed it as the demo quilt made up from the pattern and from Herrschner's craft company. Bob Lee, the quilt's owner, said:

I had three Hawaiian quilts ... and had read some books on Hawaiian quilts before I found this Island Song quilt. It fascinated and stumped me. The floral central appliqué looked Hawaiian, but it had been stretched to a rectangular format. The red on white reminded me of the classic Hawaiian color combination that I did not have. Everything else was not right. The quilting pattern was not Hawaiian. The appliqué design had been sewn together from small pieces rather than made from a single large piece. It had a red stripe framing the appliqué design. It felt light and fluffy like a department store quilt, but had a lot of hand stitching. I liked the design and decided that it would fit into my own category of "Hawaiian like" quilts. I was delighted when the Hawaiian Quilt Research Project wrote me that the quilt had been designed in Hawaii and sold as a quilt kit in the 1960s. To me it is a bridge or connection between the Hawaiian quilt and the mainland American quilt. (Bob Lee, 2000).

DISCUSSION AND CONCLUSIONS

The Hawaiian Islands are beautiful tropical locales, filled with a vast array of flowers that have inspired a variety of Hawaiian arts. Before western contact, Hawaiian women made *kapa* for clothing and bed covers; designs on these non-woven textiles were inspired by the natural environment. After missionary wives taught Hawaiian women to quilt, it is not surprising that Hawaiian quilters would continue to draw designs based on their intense interaction with the islands' tropical environment.

Traditional Hawaiian quilts are generally designs based on abstractions of Hawaii's bold and colorful tropical flowers. These are usually large appliqué quilts based on a particular flower. The design is folded and cut (like a snowflake) from one large piece of bright plain fabric and appliquéd to a light background. Traditional Hawaiian quilts are well known around the world as large appliqué quilts, done with one bright color against a light background. Echo quilting, done by hand, sets off the design in rows radiating outward from the appliqué like waves of the ocean. This traditional form was set by the mid-nineteenth century and continued with very little change into the latter part of the twentieth century largely because traditional designs were encoded with a complex set of rules (*kapus*) passed on within the family as girls learned to quilt from their mothers and grandmothers.

There are now two basic forms of Hawaiian quilting in Hawai'i. Although traditional quilting is still done, as the culture changes more quilts in Hawai'i are made in a contemporary style that is not bound by Hawaiian cultural norms and *kapus*. A wide variety of techniques are now employed in contemporary Hawaiian quilts. While the subject matter of traditional quilts is still usually floral, designs for contemporary Hawaiian quilts are based on a wide variety of themes. What has remained constant in both forms of Hawaiian quilts is the importance of the tropical environment as design inspiration for Hawaii's quilters.

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