

## Designing *Heat Wave* by S. Cathryn Zeleny

There are occasions in life when we want to create something new. These new things could include projects that we normally think of as “creative”, such as painting a picture, writing a book, or designing a house. These new things could also be what we consider to be more a goal or dream, such as planning a career, choosing a retirement lifestyle, or developing a new exercise routine.

In order to create these things, we have to generate new ideas. But, there really is no such thing as a totally new idea! It doesn't happen that way. New ideas are not the result of creating something out of nothing. Rather, new ideas are the result of taking what is already known, or what can be perceived to be possible, and putting those bits of information together in a new way.

I often use the example of Salvador Dali's painting, *The Persistence of Memory*, to illustrate this point. In the painting there are three pocket watches. And they are oozing and drooping in the manner that candlewax would if it were melting. Salvador Dali knew about these things, both the watches and also the appearance of wax when it's heated. He just put those two items together in a way that no one else had done before.

Anytime we generate a truly unique idea, we're really drawing on things that we already know. Creative ideas occur when you take one item that you know from an experience yesterday, and another bit of information that you remember from a book you read in school, and this other vague memory of a person from your past, and some visual image or odor or sound that is annoying you, and you mentally connect them together in an innovative manner. That is how a new idea is created.

You have to pull a wide variety of information from your brain, that incredible storehouse of knowledge which I call your “mental library”. And here's the thing: if you don't put anything into your mental library, you don't get anything back out!

In the course of learning creative skills, inventive people choose to indulge their curiosity. They become eclectic in their interests. They intentionally seek knowledge and a wide variety of experiences. This gives them a vast base of information to draw from when they need to generate a new idea.

I encourage you to do this as well, and start building up your mental library. Further, you can practice using what you know, to generate ideas, by setting up simple problems and goals, and attempting to create new ideas for resolution.

What I would like to do today is to introduce my quilt *Heat Wave*, and explain to you my process, the actual step-by-step thinking that took place, that resulted in its design. This will illustrate how a unique creative idea is developed. Nobody in the world had ever seen a quilt before that looked exactly like this one.

You will find that I use three tools during this design process:

1. I practice “telling one story at a time”. This means I let my ideas flow in their simplest and clearest state, usually in just a few words. It gives me a broader range of ideas, encourages the flow of those ideas, and ensures that I don’t miss something.
2. I use a method of free association that reinforces the effectiveness of one idea/story at a time. I repeat the concept I am aiming for and it brings me back on topic. For example, if I said “dog”, and then said “cat” in response because it was the first thing that came to my mind, I now have a choice of which thread to follow. “Dog” or “cat”? I choose to say “dog” again, rather than continuing on from “cat”, because it helps me stay on track with my original topic. When you're designing to a specific theme, this version of free association is more productive than the “cat” variation.
3. I also remain adaptable during the course of completing the entire project. Stuff happens! It is normal to have problems crop up and they need to be fixed, which requires another bout of generating ideas. Sometimes, the problem requires a re-evaluation of the project’s original premise, and that requires a willingness to let go of anything that does not best serve the final product.

This is the story of how *Heat Wave* was created.



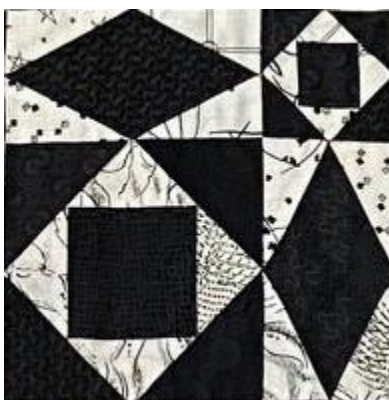
(In progress)

Quilt guilds have what are called “challenge contests”, often on an annual basis. A committee chooses a theme and sets a few parameters within that theme. And then the members of the guild are “challenged” to design a new small quilt to meet those requirements. The entry quilts are usually shown at one of the monthly meetings or at the annual public show, and sometimes voted on for prizes.

In 2003, Napa Valley Quilters, my local guild, started such a contest. The theme was “Heat Wave”, with an example being the 1963 song performed by Martha Reeves and the Vandellas. However, the quilters were invited to interpret “Heat Wave” in whatever manner they chose. The primary parameter was that there had to be a noticeable amount of the colors “white” and “black” in the quilt. And there was also a size maximum for purposes of display. That was the contest.

I went home from that meeting and started thinking about what I might be able to do for the contest. And here is my process:

1. I was walking around the house, and humming “nothing but a Heat Wave”, from the song. Those were the only words I remembered. Various visual images crossed my mind, including musical notes, and singers on a stage, and LP and 45 records. But, although I like music and enjoy singing in the shower, the music theme did not seem to trigger any meaningful connections.
2. So, I went back, and started just saying “Heat Wave, heat wave, ‘Heat Wave’”, and eventually the word “wave”, by itself, caught my attention. Waves are in the ocean and I love water! I've lived near water pretty much all of my life and I love water-related activities, whether it's splashing in a puddle, climbing a waterfall, swimming laps, walking in the rain, kayaking, or boogie-boarding in the ocean. My favorite vacation is a cruise, and my favorite food is whole Maine lobster. If it's about water, I'm there! This is a personal connection, and therefore worth pursuing.



Block

3. The word “wave” reminds me of the ocean, or a large body of water. An alternate word for ocean is sea. And I had a sudden insight, a connection that my creative mind made without conscious thought. This

project is to make a quilt. And there is a traditional quilt block called Storm-at-Sea. To be clear, I am not a traditional quilter, I am an artist who starting using quilted fabric as a medium. At the time of this contest, I had never used a pattern that already existed. But I had been exposed to them via my quilt guild, and classes, and my own curiosity which had led me to purchase a book of traditional patterns. And Storm-at-Sea was definitely the block I found most intriguing. (Please look at the image above. The “block” is a compound of four blocks: a large square with an “on-point” square in it, two rectangles with diamonds in them, and a small square that looks like the larger one. If you look carefully at the quilt in progress further above, you will see that this block is the “repeat” that creates the Storm-at-Sea pattern.)

4. Now I'm at the point where, for “Heat Wave”, I have decided that this is a great pattern to use as a focus for designing my quilt. I've got the water part of the theme, but now I have to address the rest of it. If I stay solely with the concept of using Storm-at-Sea, here is one potential direction I considered using: I could piece a pictorial image of a boat riding on stylized waves. It could be a fishing boat, or a sailboat. It could be a ship from a cruise line or a Navy vessel or an old sailing ship. And I would integrate that with the block pattern. But that does not speak specifically to the theme. I have to remind myself to “tell one story at a time”, which brings me back to “Heat Wave”. When I concentrate on the cohesiveness of the story being expressed by the title of the contest, it helps me get back on track, and I abandon the ship idea.
5. I return to my decision to use the Storm-at-Sea pattern to express the “wave” portion of the theme. I can make a wave appear to be crossing the quilt by either altering the pattern itself or by changing colors. Now, what wave am I picturing? I was thinking of ocean waves and making a stylized version of one similar to Hokusai's *The Great Wave Off Kanagawa*, which is a famous color woodblock print. A second idea was that women in the US Naval Reserve used to be called WAVES in the 1940's. And the third thought, which I followed, was that of a sine wave.
6. Remember the sine wave? I learned it in high school trigonometry, relating to the mathematical curves: sine and cosine. In graph form, there is a horizontal dotted line, and the mathematical construct is a line that goes down below the line, then loops back up to a spot above the line, then loops back down below, etc. Kind of like a snake, but sideways. And it looks a little bit like what you see on a monitor at the hospital if it's attached to your heartbeat. My clearest memory of a sine wave was a computer-generated model of my bio-rhythms. I decided that I could flatten the curve a bit and make it a gentle wave and put it horizontally across my quilt. (Again, look at the image above to see that effect.)
7. Somewhere in this part of the process of generating ideas, I also clarified that it would be best to use colors, either the hues or the values, to create that wave. (In art, “value” is the degree of lightness or darkness of a color, for instance pink is a lighter value than red.) The color parameter of the contest required a noticeable amount of both black and white. In the quilt world, we have black-and-white fabrics, a lot of them. And they're my favorite. Some of them have so few black lines on them that, from a distance, they appear very light, almost white. Some of them have so few white spots on them that they appear to be black. And there are variations for every stage between light and dark. I figured one

option I had was to use a wide variety of these fabrics to make it look as if a black wave were crossing my almost, but not quite, white quilt. Additionally, I had an idea to have the wind, that creates my wave, be integrated into the block pattern as well.

8. But the theme is Heat Wave and I still haven't addressed the "heat" part. The obvious answer is to make the wave look hot, but a black wave is not going to create that effect. Nor would a white wave should I reverse the value plan. The obvious solution is to use hot colors. Right? We all know that there are warm colors and cool colors. (It's actually more complex than that, but that's the simplified version we all learned in kindergarten.) The warm colors are red, orange, and yellow. And the cool colors are green, blue and violet. Obviously, I needed to use red, orange, and yellow in the quilt so that it would look like a hot wave.
9. How am I going to do that? Well, fortunately I had previously experimented with a technique for doing that integration. The Storm-at-Sea pattern has a number of pieces, and I change the colors of those pieces as appropriate to look like a wave, even though the edges of the colored pieces are straight lines rather than curves. It's a phenomenon of human visual perception that we believe the illusion of a curved edge wave.

That's the basic design. But just because I have that, does not mean that I am done actually designing or generating ideas. Once we start instituting a plan, either a creative project like this one or even the pursuit of a grand adventure vacation, we still have to adapt as we go along. Sometimes that's because we need to fix specific problems, and sometimes it's because we choose to modify the original plan.

Let's continue:

1. There are several ways to actually make a quilt top pattern. This is a technical decision that still requires ideas. In quilt making, there are several methods for putting fabrics together. I chose to "piece", cutting individual pieces of fabric in the various shapes, and sewing them together with  $\frac{1}{4}$ " seams.
2. Further, there are many different versions of this Storm-at-Sea block due to pattern modifications over the years. I used my architectural/mechanical drafting skills to design my own. (One note here: If I were to design this quilt now, I would choose the easier route of copying a public domain block. And I would use a paper-piecing method which has less room for error in the matching of seams.)
3. Many hours later, I have a big wave going across the quilt top from side to side, in the black-and-whites and "hot" colors. But it is a common precept in art that you want to keep the viewer's eye inside your artwork, not leading it out. Unfortunately, the human eye will follow the line of the wave right out of the quilt (artwork) if I leave it as is. Hence, my decision to add the red border with a narrow black strip. If you follow the wave from left to right, your eye will follow the red back around to the left again. And, borders are commonly used in traditional quilts. (Two solutions for the price of one.)



(In progress)

4. The next technical decision is the method for stitching the layers of the quilt together. I didn't want the quilting stitching to interfere with the Storm-at-Sea pattern, and the black-and-white fabrics already have a lot of visual texture to them. I chose to “stitch in the ditch”, which means to stitch, almost invisibly, along the seam lines. This helped me visually integrate the image as a whole, but still allow the “Heat Wave” to stand out. The stitching in the border was kept simple as well in order to support the primary visual intent.
5. Yay! I take it off of the sewing machine and I leave it sitting on a table. 3AM, off to sleep. And when I come back the next morning and walk into the room, I see it with fresh eyes. But I am looking at it sideways from the way I had designed it! By accident, I had left it laying in the wrong orientation when viewed from the doorway. And it looked better! Another thing that I learned from the art world is, that when you're doing non-representational art, the artist eventually has to decide which way will be “up”. (It is a little known fact that Georgia O'Keefe's painting, *The Lawrence Tree*, has three wires on the back. Each one allows it to be hung with a different side being in the “up” position. Presumably Ms. O'Keefe herself made the choice to add these additional wires so that it could be hung in several directions.) I, myself, had previously done this with some of my other paintings.
6. This quilt is still supposed to be a wave, a “Heat Wave”. But now, on its side, the red and orange and yellow wave is vertical, rising up the Storm-at-Sea pattern that is in black and white. So, what do I have

now? I have a solar flare; flares do come in waves. It could also be the flames of a fire, which result in waves of heat. Further, visually, vertical lines are more dynamic. If I had left it with the line going across the quilt horizontally, it would appear more calm and more peaceful. And the theme is “Heat Wave”! My final decision is to leave it in this orientation.



*Heat Wave (completed)*

That is the story of the creative thinking that resulted in this quilt being made. And here's the point. Anyone could have designed this because the basic information already existed, most people know all of the actual data that I did going into the project. If you did not remember the sine wave from your math classes, the odds are that you have seen a heartbeat monitor on television. The wave is similar. Even if you didn't know the story of Georgia O'Keeffe, you too could have walked into your workspace and seen the unfinished quilt laying on its side and just said “Oh, I like it better that way”. Even if you were not familiar with the block “Storm-at-Sea”, you might have spent the time looking at water-themed patterns, and found it. You certainly know that the warm colors of a fire are red, orange and yellow.

So, you too, could have designed this particular quilt. There is no special innate talent. And I did not need to pull it out of thin air. It really was a matter of taking simple things that are already known, and choosing to relate to

them, and then put them together in a new and unusual way. Practicing this type of thinking is the key. That's how you generate new ideas.

You can apply this to virtually any project that you're working on. Research your topic. And then research everything in general. Be curious as a way of life. Search the back of your mind for analogies. Notice serendipities. And don't forget daily experiences, and the information you learn from your emotions and your physiological senses. Anything that comes into your sphere is grist for the mill. Check out creativity exercises. They usually have great ideas for how to connect one "something" to another that is usually considered disparate. Look for relevancies that often go unnoticed.

I hope that you will consider using these techniques when you generate ideas. Moreover, I hope that you are generating ideas for your own goals and dreams.

Enjoy!  
Cathryn