Shaker Inspiration
Shaker Inspiration:  
*Five Decades of Fine Craftsmanship*

By Christian Becksvoort
ACKNOWLEDGMENTS

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Introduction

Opinionated? You bet. Nobody goes through life without forming strong likes, dislikes and opinions. Informative? Positive. Again, working at a craft for five decades or more, one acquires skills, knowledge and techniques that want to be shared.

Interesting and inspirational? I hope so. Let me state right here and now, however, that this is not intended to be the definitive last word. Nor is it intended to be a path to woodworking nirvana, nor a silver bullet for your business – and I’m not trying to foist my inspirations off on you. I am not a marketing specialist, lawyer, financial advisor or PR guru. What follows is just an overview of what has worked for me – a sharing of my experiences, failures and successes. Feel free to follow your own path. If any of my suggestions motivate or spark your own creativity, all the better.

Rigid? Not. I try to find a balance in my shop, and to suggest other options. I am not an “unplugged” or “silent” woodworker. I can’t make a living without machines. Nor am I a power-tool fanatic. I think that items spit out by CNC machines are useful for mass production, but have nothing to do with craftsmanship. I use hand tools where it shows, and machines where it doesn’t. You make your own choices.

Remember what’s important to you, your family, your friends, your standards, your idea of “craftsmanship.” Remember to volunteer, to give back and to help others.

Chris Becksvoort, December 2017
Chapter 5:
On Design

Design is an even more slippery topic than craftsmanship. Back to the dictionary. Design: “A plan, drawing or concept produced to show the look and function, or workings, of a building, garment, or other object before it is built or made.” That’s way better than the craftsmanship definition in Chapter 4. Usually, a design starts with an idea or concept. What I’m really trying to uncover here is how to develop an idea, or to put it more plainly, how does one become a designer?

Unless you are distantly related to Leonardo da Vinci, this is going to require a bit of work, education and practice. What, more practice? You bet; nothing comes easy. As I mentioned in Chapter 2, I learned how to read blueprints early on, and followed them meticulously. A lifetime of merely following plans will make you a pretty decent woodworker, but not much of a designer. You’ve got to give some thought to what you are building, and why it’s built this way. Engage mentally with your work. Why is this drawer at the bottom of the cabinet instead of at the top? Question, evaluate, compare.

Function
The biggest takeaway I’ve learned from studying, admiring and restoring Shaker furniture is that it is first and foremost functional. “All beauty rests on utility” and “That which in itself has the highest use, possesses the greatest beauty.” These Shaker proverbs perfectly state their design ethic, nearly a century before Louis Sullivan declared that “Form ever follows function.” These are words that I design by, that have served me well, that I still keep in mind each time a client wants a new piece. From a furniture maker or designer’s point of view, that, I think, should be the first and foremost principle of design.

If you’re predisposed to add your own ideas, a curve, a flair, a new texture or color, whatever, that’s fine – as long as your take doesn’t supersede or replace the primary function of the design: to be useful and functional. A chair has to function as a chair. Is that too difficult a concept to grasp? I roll my eyes when I walk into a gallery or student woodworking show and see a table with a slanted top, or a chair with no seat. “Art furniture” is great, as long as it still meets its primary criterion – to be fully functional as a chair, table, desk or bed. If your idea of whimsy or creativity overwhelms, interferes with or totally obliterates that primary use, then you’ve crossed a line. Call it sculpture if you’re so inclined, but don’t call it furniture. It gives us a bad name.

An advertisement I came up with a few years back, and still use on occasion, reads, “Any artist can make something you’ve never seen before. Very few can create something you’ll want to see or use for the rest of your life.” To quote the Shakers again, “All beauty that has no foundation in use, soon grows distasteful and needs continuous replacement with something new.” In other words, just because it’s different doesn’t automatically mean it’s good or worthwhile. I keep reminding myself not to let my sense of originality overwhelm my sense of purpose. Function is indeed foremost when designing furniture.

Historic Precedents
One can certainly do worse than to follow or imitate historic pieces when
designing furniture. I think that’s how many of us got our start. With an open mind and a willingness to learn, we can gain tremendously from copying existing work. Subtle techniques, profiles, proportions and a different way of observing can all leave impressions on us when copying good or great works from the past. Call it osmosis. Eventually you, too, will be able to discern what makes a great design as opposed to something just ordinary. For example, in one of my previous jobs, I was called upon to make Queen Anne tables and chairs. It took a while to master the technique of creating a cabriole leg. It took even longer to distinguish the subtleties of a really good leg from a ho-hum, or disproportionate leg. Eventually, I got it.

To this day, I have deep respect for the effort, craftsmanship and design that goes into that style of furniture. However, I could never figure out why a chair or table leg would need an eagle claw grasping a cue ball. To put it another way, that style never spoke to me.

Shaker designs, on the other hand, got my immediate attention. I grew up with Scandinavian furniture in our home. It turns out that in 1927, a Shaker armed rocker found its way to Denmark, where it came to the attention of architect and designer Kaare Klint. While teaching at the Danish Royal Academy of Fine Arts, he had a drawing made of the chair and had students reproduce it. It was 10 years later that Edward Deming Andrews' book “Shaker Furniture: The Craftsmanship of an American Communal Sect” was published, and the Danes discovered the Shakers. The unembellished functionalism clearly struck a chord with them.

Designers such as Børge Mogensen and Hans Wegner were equally influenced by these designs. A Danish delegation actually visited the Hancock Shaker community and returned home impressed by the clean walls of drawers, peg boards and trestle tables. Most historians consider Shaker furniture to be the first modern style furniture. As Hans Wegner noted, “There is much confusion today about what is modern, what is functional, and my hope always is that people will not be drawn to novelty, but will learn to value what is simple and pure in good design. And things should do the job they were designed for. I don’t think that’s asking too much.” Sound familiar?

The Danes took the Shaker design and functionalism to heart, and began producing their version. In the 1960s, they sold it back to us as “Danish Modern.”

**Evolution of My Designs**

I first became aware of Shaker furniture in college. In an art appreciation class, during an otherwise uneventful slide show, images of Shaker clocks, chairs, cabinets and built-ins made an appearance. I took note and something clicked. A few years later, while working in the Washington, D.C., area, I chanced upon a Shaker exhibit at the Renwick Gallery of what was then called the National Collection of Fine Arts (now the National Museum of American Art). I went back many times, transfixed by the unadorned simplicity. Little did I realize that decades later I would touch, measure and reproduce many of the very pieces I was looking at. I bought, and still treasure, the catalog from that 1973 exhibit.

**Design Elements**

Design elements are merely a set of guidelines, principles or standards that designers incorporate when coming up with a new idea. Each style of furniture has its own design elements, or distinctive characteristics, that immediately identify it as “that” style. For example, Arts & Crafts has its exposed and protruding tenons, corner braces and, of course, dark quartersawn oak.

5-1. Queen Anne tea table. This is one of my early efforts, which made me appreciate the Shaker style even more.

5-2. Catalog of the Renwick Shaker Exhibit, 1973. This was my first encounter with actual Shaker pieces.
SHAKER
Shaker has its mushroom knobs, unadorned drawers, straight lines and light ladderback chairs. French provincial is dripping with gingerbread, paint and gilding. And Chippendale has the cabriole leg, shell carvings and broken pediments. In working in any of these or other styles long enough, the elements become almost second nature, and part of your vocabulary. The more you study, practice and build, the more it all becomes part of your inherent sense of design.

Many woodworkers and designers start by copying other styles, a great way to learn. Eventually some develop their own vocabulary, or voice. Sam Maloof, for example, was influenced early by Danish Modern, and soon developed his own take, his own style. George Nakashima had deep roots in the Japanese design tradition, and was also influenced by the Shakers, but developed his own distinct design principles.

**Brainstorm Designing**

I use what I call “brainstorm designing.” When a client wants a new piece, be it a music stand, bench or room divider, I first make a list of requirements outlined by the client. Next, I take time to sketch out whatever comes into my mind. Pages of doodles. Any variation, no matter how wild, far out or impractical, is fair game. After a half-hour, or three or four pages of multitudes of diverse alternatives, I call it quits. Figure 5-3 shows the last page of a music stand brainstorm. Then I start examining, eliminating and combining ideas. Some are so far out in left field as to be worthless. They get tossed. Others have a hint of possibility—a curve or other element that makes them worth a second look. A few may be really close. Then I sketch out five or six possible options to send to the client. Figure 5-4 shows a few refined options for a standing mirror that I sent to customers. They’ll either zero in on one design or want a combination of a few elements that they like from one or two others. Then it’s back to my drawing board to refine the design. This goes on until both the customer and I are satisfied and in agreement.

On occasion, it may become clear that the client and I are not on the same page. In other words, I won’t go beyond my design elements, and they are clearly searching for something different. It may turn out that they want a ball-and-claw foot. I send them to a maker who is well-versed in that style. No need for me to re-invent the wheel. More often than not, however, we come to an agreement on one of my designs, and we get started. Many of my designs have been a direct result of a singular design for a client, Figure 5-5, my signature 15-drawer chest, was such a design. The client, a collector, wanted "something about the size..."
of a file cabinet, with lots of different size drawers." That design has been modified over the years, because I try to never build the same piece twice. The dimensions, proportions, layout or method of construction get tweaked each time. It makes my daily routine more interesting, keeps me on my toes and my sense of design fresher.

**Design Outlines**

Design outlines (or briefs, as they're sometimes called) are merely a list of requirements that a design must meet to be workable and acceptable. The client above, who wanted "something about the size of a file cabinet, with lots of different size drawers," knew exactly what he needed, but had no idea what it would look like. That's frequently the case with clients. The more information the client gives me, the easier it is for me to pinpoint what they are after, design-wise. A vague, "something for the living room" doesn't give me a good starting point, but it can be a blessing. The fewer the restrictions, the more opportunities for design expressions. Some requirements are critical, such as the dimensions of a piece that has to fit under a window, or how many people need to be able to sit at a table. That's helpful input and is welcome, while being non-restrictive from a designer's point of view.

Let's examine a Shaker ladderback chair with a design outline in mind. In my humble opinion, they are light, graceful and quite uncomfortable. Yet they meet their design requirements perfectly: A chair you sit in for 20 minutes while eating, without talking, and when you're done, it gets hung on the wall. Perfect. Maybe not your criteria, but it best serves the purpose for which it was designed.

Many designers follow the golden ratio to proportion in their work. That's the ratio of 1:1.62. It's sometime called the "divine proportion," although it's not divine at all – it was actually theo-
rized by the ancient Greeks. It is, however, a very pleasing rectangle. Many buildings, windows, frames and furniture designs are proportioned by means of the golden ratio, also known by the Greek letter phi, or $\Phi$. If you're building a special piece, this is a great place to start your design process.

In my opinion, though, a whole room full of phi-proportioned cases is wicked boring. Apparently the Shakers thought so, too. Some of their case pieces are proportioned that way, but not many. Remember that function and utility were first and foremost in their design criteria, not beauty. Look at the tall cupboard in Figure 5-7; it's only 18-1/2" (47cm) wide, but more than 6-1/2' (1.98m) tall. It doesn't come close to that ratio, but it is a thing of beauty. It is tall, austere and extremely functional for the space and purpose it was designed for. So take the golden ratio with a grain of salt. You can't go wrong using it, but don't be limited by it.

A few words on proportion, and material thickness as it relates to the size of the piece being built. It takes a while to develop an eye for determining the correct thickness to incorporate into a given overall size. The tendency for most beginning woodworkers is to purchase 4/4 (2.54cm) stock, mill it down to 3/4" (1.9cm) and use that throughout the entire project, no matter what its size. I've seen small boxes and minute cabinets that look clunky because of the material being too heavy. Likewise, large tabletops. An 8' (2.4m) or 10' (3m) table really wants to have 1" (2.54cm) or even a 1-1/4" (3.2cm) top. As a general rule of thumb, the smaller the item, the more delicate the components, and the larger the pieces, the heavier the individual parts. When in doubt, look at items of similar size to see what thickness the parts are, in order to achieve overall harmony and the most pleasing proportions.

**Design Help**

One of my favorite design tools is a proportion scale. This is a small pair of paper or plastic rotating discs, with logarithmic scales along both perimeters, from 1/4" (6.4mm) to 90" (2.28m). They are available from any architectural supply or artist supply store, or online, in both U.S. customary units and metric scales. I use it most often when someone sends me a photo of a piece they'd like reproduced. Straight, head-on photos are best. If I know the size of the piece, or the intended size, I can measure each dimension with an architect's scale. Here is how it works. Someone sends me a photo of a Shaker cupboard; the piece is 6-3/4" (17.1cm)
tall in the photo. The actual height of the piece is 84" (2.13m). Using the architect's scale, I determine that the largest scale that will fit onto a standard sheet of paper is 1-1/2" = 1' (3.8cm = 30.5cm – although metric architectural scales will obviously differ). On the architect's scale, 84" (2.13m) measures 10-1/2" (26.7cm). Using the proportional scale, I set the original size of the photo (6-3/4" or 17.1cm) opposite the intended size (10-1/2" or 26.7cm). The scale reads an increase of 155 percent. I go to my printer/scanner, place the photo inside and set the printer to enlarge to 155 percent. Press the button and voilà – a copy of the size I can use the 1-1/2" equals 1' architect's scale to take all my dimensions directly off the new enlargement.

Then there are the numerous computer-based options; SketchUp is seemingly the most currently popular with woodworkers. Others include Autodesk, Fusion 360, TurboCAD, VectorWorks, FreeCAD, OpenSCAD and many others, with new ones coming on the market all the time. Who knows what's next. Programs and applications such as these make it a breeze to draw and help you to visualize how a finished piece will look. This is most helpful if you (or your customers) have trouble conceptualizing anything in 3D. It also helps in working out details, and figuring out how best to assemble a piece. You can configure entire rooms, or show pieces from various angles. It really is amazing and mind boggling what these programs can do. My advice is to check out the SketchUp website (or similar programs of your choice, whatever may appear in the future), to see what you can do, or if that is a method of drawing and designing that you wish to use.

There are a few old standbys that have served me well for decades, which might be of interest if you have access.

5-7. Shaker tall cupboard.

The first is the book “Architectural Graphic Standards,” from the American Institute of Architects (Wiley); the most recent (as of 2018) is the 2016 12th edition. I have the 5th edition, bequeathed to me by my father. The majority of this vast volume is obviously filled with architectural, engineering and construction details. However, there are sections on standard furniture sizes, and a vast assortment of other dimensioned implements and devices. Suppose you were commissioned to build a cabinet for a cello case, a kitchen blender or a stack of folded shirts from a commercial laundry. The standard dimensions are all listed there. It is one of the most-used volumes in my bookcase in the shop.

Another resource I find of immense value is “Humanscale 1/2/3,” by Niels Diffrient and Alvin R Tilley (MIT Press, 1974). For you computer users, this is another one of those old-school gadgets consisting of plastic sheets with cutouts, and an interior rotating wheel, to show various dimensions in both U.S. customary and metric units. It contains a detailed pamphlet, and three two-sided sheets. Sheet one is Body Measurements and Link Measurements; Sheet 2 is Seating Guide and Seat/Table Guide; Sheet 3 is Wheelchair Users and Handicapped & Elderly. The Link side of Sheet 1, for example lists every dimension between the floor and ceiling, and the various items at each height: toe space, 4"-6" (10-15cm); handrail, 36" or 42" (91 or 107cm); minimum door height 78" (198 cm), etc.

Of most use to me over the years

5-8. Architect’s or Designer’s proportional scale. This tool helps you determine the percentage of increase or decrease working from a specific size.
has been the seating guide, invaluable when designing chairs. It gives you the seat height, seat length, seat width, seat angle, lumbar support and thoracic support for children of various sizes, small to large females, and small to large males. Of course that varies with the type of chair: straight; executive; lounge; waiting room; and even a variety of vehicular seats (bus, sports car, tractor). “Humanscale 1/2/3” is currently out of print, although some are available used online (but very pricey). Hopefully, someone will resurrect it – or at least make an app from it. It’s invaluable.

You can probably Google any of that information, but it’s handy to have right at your fingertips in the shop. I don’t keep a computer in the shop because of the dust. My advice? Use whatever design tool works best for you.
“Trifles make perfection, but perfection is no trifle.”

- Shaker Proverb