

Tips for Better Design

How to find new ideas and do justice to them

MICHAEL FORTUNE

everal times a year I have the opportunity to teach a twoweek class in furniture design and construction. I enjoy the challenge of working with people who think they are incapable of designing their own furniture. Most of my students are mystified about where design ideas come from and how they are developed.

Most articles about furniture design begin with the classical orders-golden mean, Fibonacci series, etc.-and end with wellknown period pieces. My broader approach to design was distilled from my training at a commercial furniture-design school in the early 1970s, and refined over my 30-year career as a furniture designer and maker. I've found that great design ideas can come from anywhere, and the standard rules can choke inspiration rather than free it. For example, look to other cultures and you'll find ideas that will appear brand-new in your own. Some of the most obscure corners of history are hiding beautiful ideas that you can borrow and adapt.

After you find a rough idea that resonates with you, you'll need to work out the overall proportions, lines, and details, guiding the design toward a successful conclusion. I'll share my primary sources of inspiration, and some visual dos and don'ts that have worked for me.

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Look around you _____

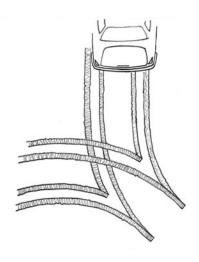


f you are receptive, ideas can come from almost anywhere. In design school, my instructor's interest in three-dimensional puzzles spilled into his furniture. I admired the unusual origin of his designs, and was inspired to look differently at objects around me.

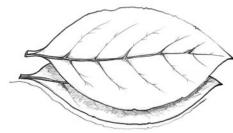
Almost anything from any culture-bridges, buildings, fine art—can inspire a design. If it strikes you as beautiful, it probably will resonate with others. Better yet, they won't know exactly why. When walking through a museum with my children, I came across a vase made in Mesopotamia about 6000 B.C. Captivated by the simple elegance of the shape, I returned to my workshop and doodled casually in an effort to convert the profile of the vase into the profile of a table leg and apron.

If you like gardening or the outdoors, natural forms are worth exploring. Plant stalks can become table legs. and leaves might inspire shapes for tabletops. If you are intrigued by structures like bridges, dams, and buildings, they can inspire any number of table bases.

From tire tracks to a table. In the interplay of curves on a snowcovered driveway, Fortune found the base of this hall table.







Organic curves. The leaves of a backyard ash inspired this pivoting side table (top). The stalks and leaves of the daylilies in Fortune's backyard inspired this table base (right).





Nonstandard thicknesses. The thick, solid-wood top on this nightstand helps to distinguish it from factory furniture.



Avoid factory dimensions

Mass-produced furniture is characterized by a limited number of thicknesses. These endlessly repeated dimensions are everywhere—in chairs, tables, and cabinet frames. This is because it is much cheaper for lumber mills to work in huge quantities, taking all 1-in. lumber to a uniform ³/₄-in. thickness. Fine furniture is not made with the same expediency, so we can successfully mill 1-in.-thick stock to ⁷/₈ in. or thicker. Avoid common cross sections such as ³/₄ in. by 1³/₄ in. or ³/₄ in. by 2 in.; basically, avoid any common premilled dimension found at large lumber retailers.

Look to history

he history of furniture is wonderfully diverse and goes back about 6,000 years. It is a rich source for inspiration. It isn't necessary to copy what has been done before, but it is important to learn from it. Try as you might to be completely original, you can't escape being influenced. Your furniture-design preferences are shaped by the style of furniture that you grew up with and what is immediately around you. By browsing through historical texts, you can gain a much broader interpretation of what you like and of what furniture can be. For example, the Cubist painting style made famous by Picasso, circa 1920, also spawned a Czechoslovakian Cubist furniture style. If you are interested in furniture made entirely with angled shapes, then this era is worth further research.

Over the years I have collected many reference books on the history of furniture. I turn to a few of them again and again to develop the proportions or other details of my rough ideas. When I designed my No. 1 chair in 1979, I was initially inspired by a piece of old, rusted, metal garden furniture. I was fascinated by the unusual

placement of the various parts and how they intersected. I added the influence of several furniture designers, notably Charles Rennie Mackintosh (Scotland), Hans Wegner (Denmark), and Frank Lloyd Wright (United States). To blend all of these ideas successfully, I moved from numerous simple sketches to quarter-scale mod-CLASSIC els and then to several rough, full-size mockups. I have sold 300 of these chairs.



Books are another source. To generate ideas, Fortune flips through World Furniture, edited by Helena Hayward. To refine his ideas, he consults the clear line drawings in Classical European Furniture Design, by Jose Claret Rubira. He also looks at Classic Chinese Furniture, by Wang Shixiang, which has clear photographs of spare yet beautifully proportioned furniture dating back to 1400.



His signature chair. Fortune's No. 1 chair was inspired by a piece of rusty garden furniture. He refined the design with the influence of several past furniture designers.



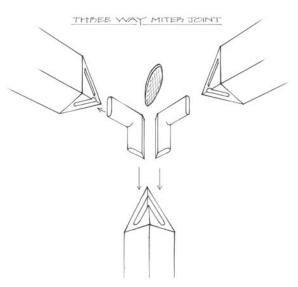
Mesopotamian lines. An 8,000year-old vase in a museum inspired this table's leg and apron profile. Fortune reversed the lower curve to avoid a pigeon-toed look.



Design first, engineer second

Your creative process can be restrained by your existing knowledge of how to work with wood, so don't worry about the details of the "how-to" during this time. Just keep in mind the bigger issues like structural integrity and wood movement. Before you think about joinery, brainstorm and develop the design.

Once you have a design you like, tackle the technical details. There is so much excellent reference material available these days, such as books, magazines, and DVDs, to assist us with resolving the construction details of furniture. Rarely will you invent a design that is completely new. More often than not you will find a joint or a woodworking technique that is close to what you need.



First the table, then the joint. Searching for an efficient way to build this clean-looking three-way miter joint, Fortune came up with a pair of L-shaped plywood tenons that fit into router-cut mortises. The joint, in turn, made dozens of other tables possible.







The rule of three. Don't combine more than three strong design elements. The focal point of the cabinet (above) is its curved and stepped front. The bee'swing mahogany is the second element, and the contrasting detail is the third. The dominant feature of the table (left) is the shape, low but with dramatically curved legs. The contrast between the Macassar ebony and the Australian lacewood is the second element, while the four-way matched grain is the third.

Simple is good

t's easy to overdo things with ideas under the heading of "Wouldn't it look nice if I..." Don't get too complicated when developing your designs. I generally recommend working within a loose guideline I call "the rule of three." By that I mean that each piece of furniture should have no more than three strong design elements that work together to complete the whole.

Decide first on a focal point—the primary design element—and showcase it. Let the other two elements play a supporting role. The primary element is usually, but not always, the overall form or shape. The second may be the color and texture of the dominant wood. And the third element is usually any obvious detailing like inlay or knobs and pulls.

An accumulation of disparate shapes, woods, doors, drawers, and shelves easily can overpower an overall design. It very well could be that there is simply more than one piece of furniture on the drawing board and that they have to be separated. So build one, and just sketch the others to be built later as part of a series.

Think of pieces as people ____

Objects broadcast signals that we interpret according to our own likes and dislikes. I am attracted to objects that have a receptive, almost human quality. For example, when I walk into a room with several different chairs, I go to the chair that looks comfortable and appears to have its arms open, welcoming the viewer. I have designed many chairs over the years with this receptive quality in mind.

People are used to seeing bodies and evaluating posture, so pay attention to the stance of your pieces in a human sense. Just as someone standing with their feet pigeontoed appears awkward, almost embarrassed, furniture with inward-pointing feet also will seem ungainly. The same goes for a bowlegged stance (knees out) or knock-kneed (knees in): Neither is seen in the enduring fine works of art. Curves are also an essential human quality (see p. 59).

Similarly, I find the graceful form of a ballerina more attractive than the bulky, knotty shape of a wrestler. With this in mind, I am inclined to design furniture that is composed of lightweight linear elements rather than massive shapes. A boxy, heavy shape can be lightened simply by putting it on a pedestal that is set back from the leading edges (sometimes called a "toe kick").





A ballerina's stance. Fortune prefers graceful forms to knotted, muscular shapes, and believes others feel the same way.

A welcoming embrace. With arms open, Fortune's chairs invite the viewer to take a seat.



Upward and outward

Another way I try to make a connection with the person viewing my furniture is to have it connect to its surroundings. Most of my furniture consists of shapes and details that extend outward as they move upward, subliminally connecting them to their surroundings. Usually this means pieces are larger at the top than at the bottom, but sometimes a flaring cornice is enough. Furniture that has inward sloping lines may appear to be solitary, less engaging, and even heavier than it really is.

Connected to the world. Fortune's pieces reach outward as they move up, tying them to the space and objects above and around them.

Curves add interest

A simple approach to making your work stand out is to use techniques that appear to be difficult to master. Curves are a good example. Keep in mind, though, that lots of curves on one piece of furniture can distract and ultimately tire the viewer.

Other woodworkers may be intrigued by the technical mastery involved in working with complex curves, but I don't think most viewers or buyers are knowledgeable enough to be sufficiently impressed. I rarely design furniture with compound curves, which move in two planes at once; I prefer to work with a few simple, single-plane curves in each piece.

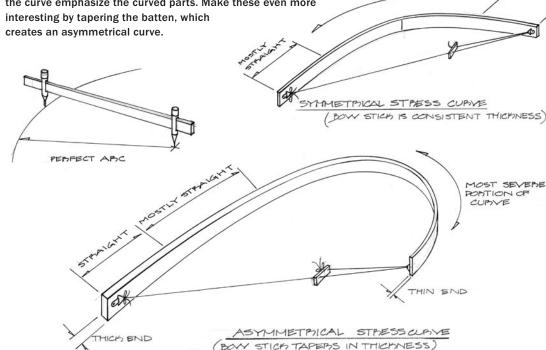
On the other hand, try not to interrupt curved elements just to make joinery easier. For example, a graceful curve on a chair leg can be compromised by leaving a flat section to accommodate an intersecting stretcher. Similarly, a flat spot on a table leg where it meets the apron smacks of the expeditious joinery techniques found on mass-produced furniture.



Curves soften a boxy dresser. Bent-laminated drawer fronts turn an ordinary chest of drawers into a more graceful and unique piece of furniture.

DRAW A RADIUS OR BEND A BATTEN

While a simple radius curve will liven up a rectilinear piece of furniture, a stress curve is even more dynamic. Stress curves are more common in nature, and the straighter sections of the curve emphasize the curved parts. Make these even more interesting by tapering the batten, which creates an asymmetrical curve.







From lawn to living room. Fortune's design for a simple garden chair led to a hardwood version. Aside from the dark wood and upholstery, he added a soft arch to the seat rail.

Evolution, not revolution

CURVE

Designing and building furniture as part of a series is a great way to completely explore and resolve an idea. You take what works best in each piece, and then apply it to the next. Your design and construction learning curve will shorten. You also may save time by reusing specialized jigs or bending forms. At the very least you will build confidence as you go. Remember, a design idea doesn't have to stay within one group of furniture, but can extend from tables to cabinets to chairs.

I call this an "evolutionary" approach rather than "revolutionary." I might work in the same vein for months or even years until my designs evolve into something quite different. Along the way I am continually making design discoveries and recording them in a sketchbook for exploration someday. The great thing about revisiting an idea months or years later is that you come at it with experiences collected along the way.