

Artistry, technology, and craft

A FORMER INDUSTRIAL DESIGNER'S QUEST TO CREATE FUNCTIONAL ART

BY GERARD FURBERSHAW



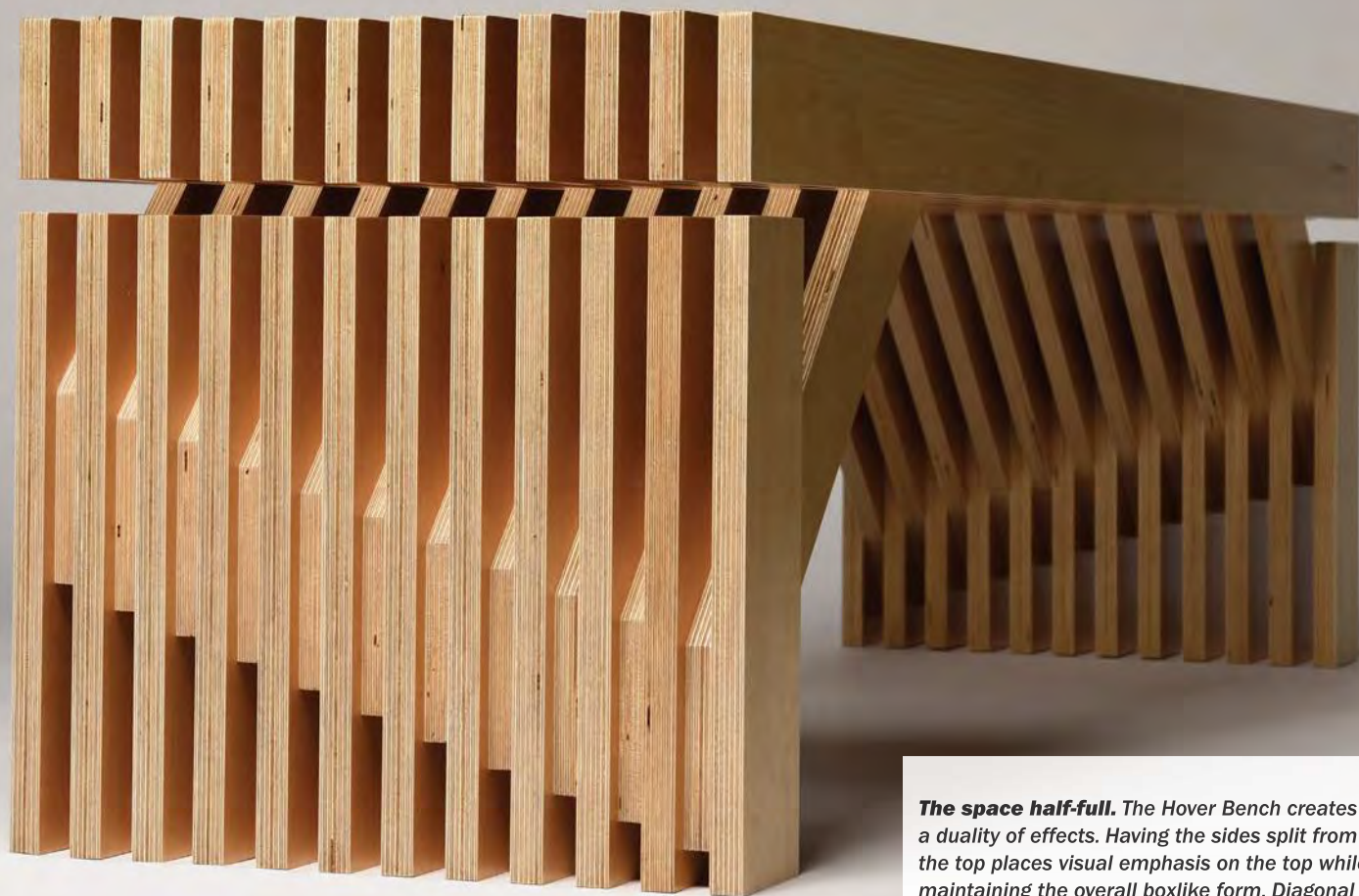
In my previous career as an industrial designer, I worked on a number of conceptual furniture projects and became captivated with the notion of furniture as art. I launched Furbershawworks to pursue work in the art furniture domain, the creation of art you can sit on. I transformed from an industrial designer who used my design skills to solve clients' business problems to an artist focused on self-expression.

The three key pillars: layering, contrast, and negative space

Initially my focus at Furbershawworks was exploring the possibilities of art furniture enabled by 3D printing. I began looking at pieces that were composed of layered plywood parts that I could make myself. I became fascinated with using positive/negative space to create forms that appeared solid visually but were in fact about half plywood and half empty space. I also liked the effect created by contrasting the plywood's face and edge grain. My go-to material has been 13-ply maple plywood, but recently I have begun making pieces from Plyboo bamboo plywood.

Industrial design skills still come in handy

Even though I now see myself as an artist, I continue to rely heavily on my industrial design skills to design and make my pieces. All of my work is created in Rhino, a computer-aided design (CAD) surface modeling software. After I'm finished creating the Rhino model, I export it into KeyShot



The space half-full. The Hover Bench creates a duality of effects. Having the sides split from the top places visual emphasis on the top while maintaining the overall boxlike form. Diagonal braces connect the sides to the top, creating the load-bearing structure. The braces progress from small to large on one side and large to small on the other.



A new material. The Hover Too Bench was Furbershaw's first bamboo plywood piece. Beyond its environmental benefits, bamboo possesses a stunning inherent beauty. Unlike normal plywood made from sheets of veneer, the $\frac{3}{4}$ -in. material he employed (which Plyboo calls "edge grain bamboo plywood") is made into 4-ft. by 8-ft. sheets by gluing together scores of bamboo strips that are 8 ft. long, $\frac{3}{4}$ in. wide, and $\frac{1}{4}$ in. thick.



The details are in the name. Furbershaw's 2323 bench is made from 75 rectangular pieces of maple plywood that interlace at the ends. The top and legs are composed of alternating short and long pieces, and the short pieces stop one plywood thickness shy of their intersecting parts, resulting in 23 square voids on each side of the bench.



Leg shape creates the overhangs. Cornici is the Italian word for cornices, wind-driven accumulations of snow that overhang the ridges of mountains. Similarly, the Cornici bench consists of squiggly legs that penetrate each end of a horizontal slab, creating symmetrical overhangs.

(a rendering software). The images generated by KeyShot enable me to visualize the piece more vividly and to make refinements. I have also used the Rhino CAD files to have laser-cut maple plywood scale models made. Using 3mm plywood at $\frac{1}{6}$ scale means that the proportions are aligned accurately with the full-scale piece's 18mm plywood. I also use the CAD files to have the full-size parts for my pieces machined using computer numerical control (CNC).

The craftsmanship of finishing

After the parts are CNC machined, I sand, apply finish, and assemble them into the final piece. This part of the process relies on old-fashioned craftsmanship, introducing an element of tender loving care.

I have been using Osmo Polyx-Oil or Osmo Polyx-Oil Raw (which keeps yellowing to a minimum) as a finish. I like Osmo because it's durable, the wood's surface can be easily refinished if it's scratched, and it's VOC free.

Its natural oil and wax coating is the crowning ingredient in my process.

The Furbershawworks legacy

Like most artists, I would like to leave a legacy. My pieces are made to last so future generations can experience them. Artists sign their paintings. I literally brand my work with the Furbershawworks name to lay the groundwork for that legacy. □

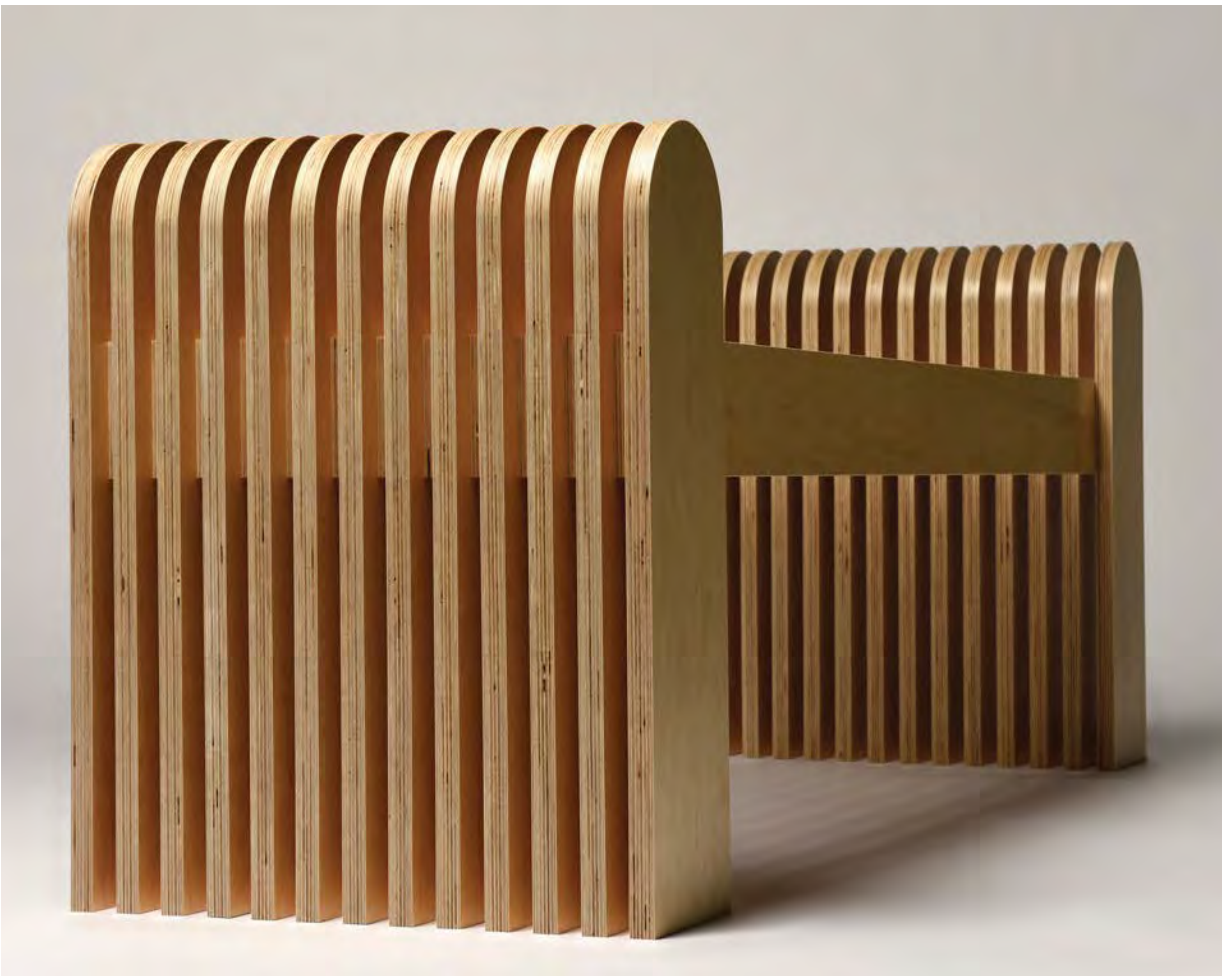
Gerard Furbershaw makes his pieces in Menlo Park, Calif. His website is furbershawworks.com.



Interlocking legs and seat. The Yin & Yang consists of legs that lock into each end of a capsule-shaped slab, creating symmetric overhangs. The joint between the legs and slabs, with its yin-and-yang feel, is another example that demonstrates the capabilities of CNC machining.



Overlapping legs and seat. The Olap Bench consists of a seating surface with ends that overlap its legs. The legs and the seat slats terminate in nesting half rounds, forming an S-shaped jointline. Furbershaw likes to take advantage of the capabilities of CNC machining to create visually interesting joints like this.



The not-so-cushy couch. Aspiring to be a cushy overstuffed couch with obligatory raised armrests, the WannaBe Couch succeeds only in mimicking its iconic form through a spartan framework.