



Curvy Furniture: The Stich-N-Glue Method with David Orth

June 3-7, 2019

Some years ago, I took a little break from my furniture making and built a wooden kayak with a strange sounding "stitch-n-glue" method. Halfway into the composite building process, I found myself oddly nervous – the organic form that was slowly emerging from this pile of thin flat sheets simply blew my mind. It dawned on me that my furniture from now on would never be the same. The skill level was easy, but the design of forms like this took some serious, intuitive thought. It nearly broke my mind, until I discovered some simple ways of thinking about it. I look forward to working with you – and frankly, it's fun to watch the dawning lights.

Schedule

Day 1

Introduction

Slide Show of boat and subsequent furniture projects

Geometry & form development

Pattern derivation

Stich-N-Glue technology: what you need and how it works

Begin practice project: a freeform pedestal

Day 2

Finish practice project

Discussion of the "Rules of the Road" for this kind of designing

More methods of form development

Start 2nd projects – choice of side table, floor lamp, or your own design

Day 3

Continue 2nd Projects

Brainstorming, Q&A Session

Discussion of methods of finishing: coatings, veneer, and other (consider adding the 2-day hammer veneering class I teach following this one)

Day 4

Continue Projects

Brainstorming, Q&A Session

Computer Aided Form Development for interested folks – continued projects for others

Day 5

Completion of projects

Brainstorming, Q&A Session

Clean Up



Tool Lists (must bring & recommended)

Must bring:

- eye protection
- ear protection
- pencil
- 10 pairs of disposable latex or vinyl gloves
- drill and 1/16", 3/32", & 1/8" bits
- common pliers for gripping (something you won't mind modifying slightly for our purposes of gripping & twisting wire)
- side snip wire cutters (sometimes called diagonal cutters)
- Large medium rasp and coarse metal file (don't bring expensive rasps you wouldn't use on MDF & epoxy)
- roll of 3/4" blue masking tape
- 1" & 3" putty knife
- sandpaper - 3 sheets of 80 grit

Recommended Tools (there may be a few available at the school for sharing)

- 4 – 2" conventional spring clamps
- spring miter clamps (Ulmia type, small to medium opening – but only if you have them)
- Utility knife
- spokeshave
- sanding block (hard block)
- drafting supplies: drawing paper, pencil, architect's rule, flex curve, compass
- full-size scissors for paper or posterboard
- jig saw (handheld reciprocating saw) and 2 fine tooth jigsaw blades (T shank if you plan to use MASW jigsaws – metalcutting blades 18TPI (such as DeWalt DW3774) work well on the 1/8" MDF we will use)
- sharp chisel – 1" or 1.25"

Transportation/shipping note:

The final sizes of the build projects are in inches. The pedestal and lamp will fit into most mid-sized or bigger cars. Each student will build a pedestal and one other item from this list or from their own drawing board:

- Pedestal – 38 x 12 x 12
- side table - 42 x 34 x 17
- floor lamp - 71 x 11 x 11



Suggested reading: We will cover everything in class, so there is no reading requirement. However, there are plenty of references to the "stitch-n-glue" method on the internet. Check out this one:

<http://www.pygmyboats.com/Construction.htm>

Don't let the complexity of the kayak project intimidate you! Our projects will have less than a dozen parts and no fiberglass fabric.

I look forward to working with you. Feel free to call or email with your questions. As noted above, I will be teaching a 2-day hammer veneering class immediately following this one. Consider joining us for an in depth look at this finishing option for the forms you have built.

Best wishes,

David Orth