



WOOD FORUM

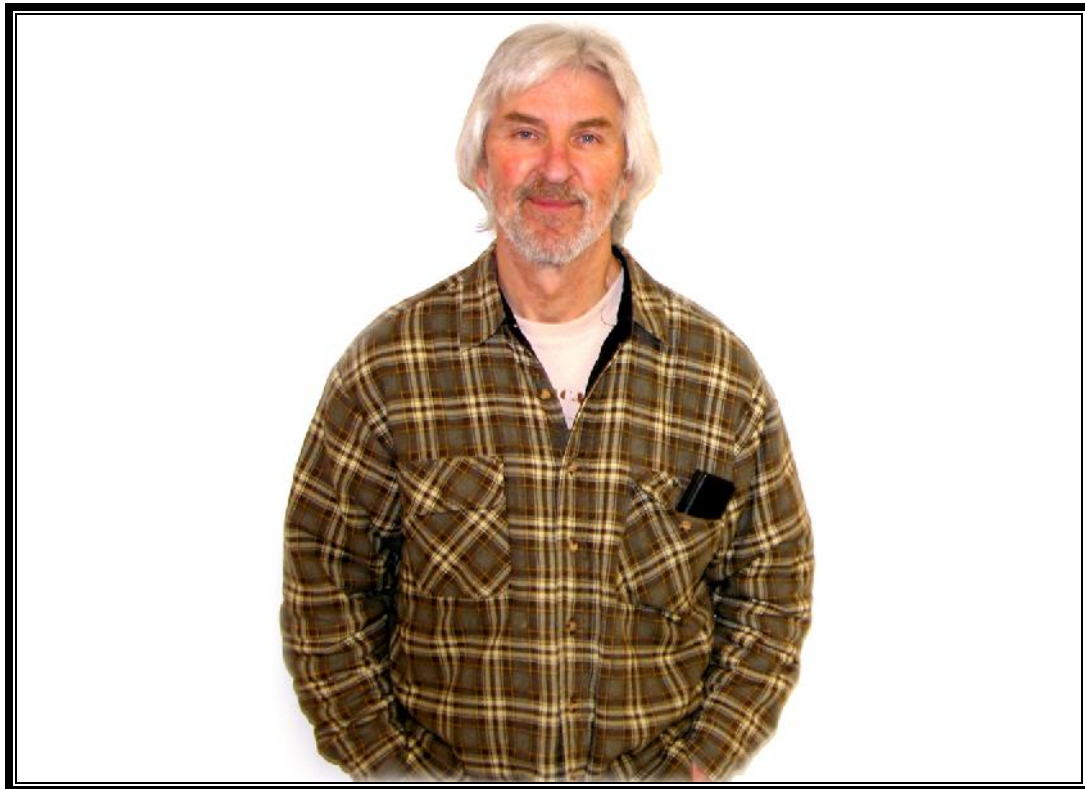
Newsletter of the Sonoma County Woodworkers Association

www.sonomawoodworkers.com

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March 2012

February Meeting John Lavine, Chinese and Japanese Joinery



Inside:

March Meeting Notice
February Meeting
Calendar
Artistry in Wood 2012 Judges Named
Hofmann Tansu in Fine Woodworking
Chinese/Japanese Joinery Bibliography
Harvesting Your Own Trees
From the Chairman
Digital Workshop

March Meeting Notice

Who: Walter Kitundu, Artist-Sculptor on Musical Instruments

Where: Cotati Cottages, 8050 Starr Court, Cotati, CA 94952

When: March 6, 7:00 PM

Walter Kitundu is the inventor of the *Phonoharp*, a stringed instrument incorporating a phonograph. After hearing the instrument, the Kronos Quartet hired Kitundu as their instrument builder in residence. For the song *Tèw semagn hagèrè* on their 2009 album, *Floodplain*, he created new instruments inspired by the *begna*, an Ethiopian 10-string lyre. As of 2008, Kitundu is a Multimedia Artist with the Exploratorium, Artist-in-Residence at the Headlands Center for the Arts, and a Distinguished Visiting Professor of Wood Arts at the California College of the Arts.



The meeting will take place at 7 pm on Tuesday, March 6 at Cotati Cottages at 8050 Starr Court, Cotati. Directions are as follows: Head to Cotati. From points north and south take Highway 101. Exit at Highway 116 and take it to the west towards Sebastopol. Look for Alder Avenue, which is about ¼ mile after Highway 101. Turn right on Alder and then turn right on the first street which is Ford Lane (See Cotati Cottages sign). Proceed to the end of Ford Lane and park in the gravel parking spaces. The Clubhouse is the small building on the northeast corner of Ford Lane and Starr Court. There is limited parking near the clubhouse. If the gravel parking area is full, please park on the east side of Alder Avenue. People live here, so be mindful of foot traffic.

February Meeting

By Art Hofmann

Business Meeting

A business meeting convened at 5 pm at Steve Wigfield's shop. Officers present were Wallace, Masumoto, Heimbach, Lashar, Hofmann, Burwen, Stroud, and Taft. The main discussion concerned the expense of producing and mailing hard copies of the Forum which runs 18/year per individual. After a vigorous debate, a motion to charge \$15/annum to members who wish to have a hard copy sent to them was proposed, seconded and passed.

Officers went over a preliminary budget, put together by Treasurer Jim Heimbach. Art Hofmann contributed a \$2,500 annual budget for the costs associated with retaining meeting speakers and judges for the Artistry in Wood 2012 show. The amount was agreed to by consensus.

Michael Masumoto, our Show Chair, discussed the meeting with Eric Stanley of the Sonoma County Museum, attended by himself, Michael Wallace and Hofmann, which had largely to do with the expectations of the Museum and the handling of expenses for the show. It seems that we will be upstairs again this year. Standards in terms of workmanship for entries might be raised and there might be an increase in fees for entries to offset show expenses. More on this subject will be forthcoming along with a final show budget, which we hope will be submitted at the next business meeting.

General Meeting

Chairman Wallace began the general meeting on time. He said that dues would be maintained at \$25/year plus an additional \$15 for those opting for hard copies of the Forum. A renewal letter will be going out shortly.

Several guests were present: Scott Braun, a decade ago member and former officer, re-introduced himself. Other visitors included Tom Tenore, Scott Borski, and Amy Hubbard. Dave van Harn talked about his move to Boquete, Panama. He has a blog about his new adventure. Mike Wallace then thanked Steve Wigfield for letting us meet at his shop. Steve briefly told us about his long-time custom window and door business. Michael Masumoto discussed the August show plans and called for volunteers to help with the organization.

Art Hofmann then introduced the night's speaker, John Lavine the former editor of *Woodwork*. John is currently building furniture, doing free lance writing and editorial work for woodworking publications. Before becoming an editor, John was a remodeling carpenter and a furniture maker. In the early '80's he met

Makato Imai, the Japanese temple builder who was working on San Francisco's Zen Center's Green Gulch retreat in Marin County. John studied with Imai and began to use some of the techniques and joinery he learned from him in his own work. Chinese and Japanese joinery have their own histories but have the same roots even though they grew out of different cultural traditions. Chinese joinery was probably fully developed by 7th century BCE. There is early evidence from bronze boxes that contained metal joinery thought to have imitated wood joinery.

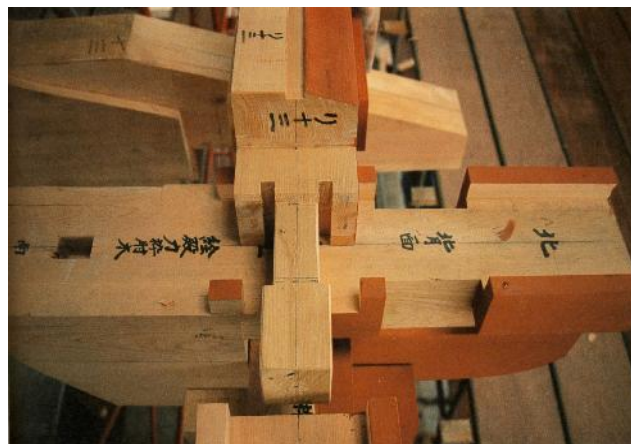
John began his slides with architectural examples of pagodas and temples. John showed a pagoda in the present day town of Nara, Japan dating from 730 AD. This 3-story building survived earthquakes, fires, and wars and is the oldest existing fully realized example of Japanese wood-on-wood joinery. The next slide showed a 1975 reconstruction of a building on the same grounds originally built at the same time as the first. In other words, Japan tradition of wood joinery lives on into the present day.

Both Chinese and Japanese cultures began as "mat cultures where people ate, slept, and worked at floor level. Chinese culture diverged from that tradition after exposure to western and Indian influences. Campaign chairs were probably the first instance of what we would term furniture. Buddhist monks traveled to India, where the throne was an established idea. Ideas disseminated. These and their successors were intended for high ranking officers (c.f. Ejler Hjorth-Westh's comments on chairs of last year), who then needed tables, cabinets, etc. In addition, China had access to hardwoods from southeast Asia, which Japan did not have..

Thus, Japan continued as a mat culture, a tradition that carries into present day Japan, especially among older people from rural areas. The entire Japanese system of building is created by an area dimension called the "tsubo." A *tatami* mat, roughly 3' x 6' occupies the space of one-half a tsubo. All Japanese construction is based around a whole number multiple of tsubo.

Japan had vast forests of cedars and other softwoods which were the materials of choice, initially in their architecture, and later, in furniture. John showed a slide of half of a splicing joint that formed a supporting bracket assembly that created a pad for horizontal members to land on. Then he showed slides of variations of scarf joints, an essential element in Japanese joinery. Some of these were designed to prevent twisting or torque. Layout for all joints began with a center-line. Examples moved from simpler to more complex joints. Because they are dealing with massive timbers, and joining one to next, timbers are not necessarily absolutely the same dimension, thus all joinery begins with a center line. Joints are standardized in terms of proportions; a gooseneck for instance had to be of a certain proportional length. Though many joints were

common throughout Japan, some elaborate joints were guarded secrets of guilds, handed down only to members.



John explained a bit about Japanese saws; the *ryoba* is the standard saw used in traditional architectural framing. It has cross cut teeth on one side, rip on the other. Unlike most western saw cuts, the Japanese saw right on the line which works because their saw blades are so thin. Marking out is done with an ink pad and a bamboo quill. Slides followed of the saw (and a chisel) being used to cut a half blind mortise and tenon gooseneck joint.

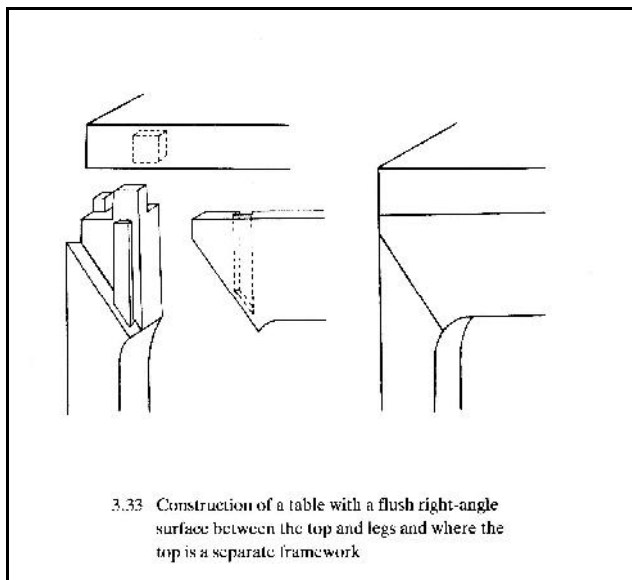
Joinery that began on architectural scale projects, over time made its way into furniture, and ultimately into very fine work like *shoji* screen joinery, where joints might be created in woods that were an inch or less across. These small joints are cut with a stiff-backed *dozuki* cross cut saw. Similar joinery exists in the West. John showed a hammerhead joint used in a door frame in an English 19th century building.

John followed with a series of slides relating to the evolution of Chinese furniture. A box loses its sides, which becomes legs, though it retains a bottom panel; eventually, it becomes a free-standing piece, a low table, still in the mat-level mode. Wood quality improved over time, and as the great hardwoods of Southeast Asia came into play, permitting the joinery to become very sophisticated.

Glue, not used in architecture, was used in furniture, sometimes. Mainly, fine cut joints, some of them keyed, held elements together. The wood-to-wood joinery is so strong, that glue is not essential. Japanese furniture is rather straight-lined. Chinese furniture is very elaborate, quite symmetrical, and used many curvilinear elements in its design. Curves were achieved with shorter elements carefully joined. Joinery is never displayed, always hidden; end grain exposure is also eschewed in Chinese and Japanese joinery. The impetus for much of the elaborateness of the joinery was often this deeply held rule that end grain not be exposed. And the techniques have held up with time. Some older furniture shows cracks, but

retains its form amazingly well. Examples have lasted several hundred years.

John then illustrated how, in furniture construction, posts had tenons that were let into horizontal members in complex ways. Through tenons pass by each other, stub tenons, three rails cross one another, three pieces lap each other.



John showed several slides of pieces by George Nakashima. One featured a shoji-like design pattern with elaborate, angled half laps. Another was a box designed to show off half-lap joints so that end grain is shown on both ends of a corner, a technical achievement that stands the no-endgrain taboo on its head. Once it is together, it is stable, but, as one member commented, "God help you until that moment."

Next there were several slides of Ming dynasty Mandarin-style chairs. Here the arm construction features hidden mitered stub-tenons, sometimes even dovetail tenons. Leg-rail connections are sometimes offset. These pieces display a lot of strength and have held up well over the ages considering the stress that was put on them in use.

Work that is rounded was not done on a lathe. Round elements were derived from square stock which was formed into an octagon and then faired. Round pieces were shaped cutting tools. John said that he had watched Imai use a chisel to form square pieces to an octagon and slowly, fair then to rounds with a chisel and a plane.

The DeYoung Museum some years ago had a show featuring classical Chinese furniture. The Museum commissioned Yeung Chan, a well-known Bay Area woodworker who has studied classical Chinese joinery, to make a replica of a classical chair, which he did. Made of cherry, the construction is completely authentic to the

ancient originals. The seat is a frame and panel. There are holes for the seat posts. The side assemblies of the legs go together through mortise and tenon pieces. The chair features traditional three-mitered corners. There is a four part construction of splicing joints and pegs. The supports for arm come into the legs. It was shown at the Museum and Jeung also demonstrated its construction in numerous venues, putting it together and taking it apart many times.

In closing, John showed slides of two *tansu* he had made featuring many Japanese elements. He used a light wood for the face elements, doors and drawers, and a darker wood for the frame. Although the piece has many elements of classic Japanese construction, he dovetailed the drawers, which made Toshio Odate chuckle. In Japan drawers are simply joined with little peg-like trunnels – essentially wooden nails. Traditional *tansu* is all about the front surface, the facade, the only view that was seen by someone sitting on a mat.



John's final slide featured a second *tansu* he had made, this one with salvaged elements, mainly old motorcycle packing crates!. He wanted to do something as difficult as possible with rough materials. The woods originated from the forests of Borneo and Southeast Asia, and included mahoganies and rosewoods of various kinds. He left all the

surfaces rough except the ones that had to work, like drawers. Otherwise the wood was left as he found it, showing the stenciled packing instructions in Japanese characters. The panels on the front and the drawer faces were made of delaminating plywood. Throughout, the joinery was classic Japanese.

John stated that there are traditional guilds still exist in Japan. Sometimes rich donors have temples are reconstructed, or houses built for themselves. *Kezuro-kai* are annual contests that are held, where Japanese joiners come together to compete in various aspects of their craft. The number of people however, who keep the tradition going, is dwindling.

In reply to a question, John said that Korea also has a rich tradition of furniture making using sophisticated joinery that still lives on. He also mentioned that Japan has a managed forest program designed to ensure that traditional materials will be there for future generations.

John handed out a list of publications relating to the subject which is reproduced later in this publication. The evening then drew to a close with a round of applause for our speaker.

Calendar

March 6: Walter Kitundu; Musical Instruments, Artist Sculptor

April 3: Laura Mays; Furniture Maker, Educator from Ireland

May 19: Bruce Johnson; Sculptor

June 20: John Economaki, Tool-maker extraordinaire

Artistry in Wood 2012 Judges Named

The three judges for the Artistry in Wood 2012 have been selected. They are:

Roger Heitzman is a full time furniture maker from Santa Cruz, California, who specializes in Art Nouveau, Arts and Crafts and Art Deco designs. He has won numerous awards in shows on the West Coast and in the Mid-West, taught in a variety of settings and venues including Anderson Ranch in Aspen, CO, and published a long series of articles and several books. To peruse his work and background go to <http://www.heizmanstudios.com/>

Elliot Landes is a retired turner from Winters, California. He was the owner of *Penmakers*, his specialty being fountain pens made of exotic woods. He is said to have an excellent and educated eye for design is very articulate on the subject of wood turning. His website is <http://penmakers.com/>

Laura Mays is an administrator and teacher at the College of the Redwoods Fine Furniture program in Ft. Bragg, CA. She studied at College of the Redwoods and in her native Ireland, where she ran a woodworking business with a partner, Rebecca Yaffe. She also did graduate work in teaching crafts and woodwork at National College of Art and Design, Dublin. Her website can be seen at <http://yaffemays.com/>

Hofmann Tansu Featured in *Fine Woodworking*



Art Hofmann's beautiful tansu, that he exhibited at *Artistry in Wood 2011*, was featured in *Fine Woodworking* magazine's March/April issue, page 84. The picture was taken by our very own Larry Stroud. Kudos to Art for well-deserved recognition. (Note: Your Forum Editor picked Art's piece as "Best in Show" - vindication is sweet!).

Chinese/Japanese Joinery Bibliography

From John Lavine

Chinese

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Robert Hatfield Ellsworth et al, *Essence of a Style: Chinese Furniture of the Late Ming and Early Ching Dynasties*, Asian Art Museum, San Francisco, 1998

George N. Kates, *Chinese Household Furniture*, Dover Publications, New York, 1962

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Japanese

S. Axby Brown, *The Genius of Japanese Carpentry: An Account of a Temple's Construction*, Kodansha International, Tokyo and New York, 1989.

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Mitsuo Inoue, *Space in Japanese Architecture*, Weatherhill, New York and Tokyo, 1985

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Kazuko Koizumi, *Traditional Japanese Furniture: A Definitive Guide*, Kodansha International, Tokyo and New York, 1986

Edward S. Morse, *Japanese Homes and Their Surroundings*, Dover Publications, New York, 1961

Yasuo Nakahaara, *Japanese Joinery. A Handbook for Joiners and Carpenters*, Hartley & Marks, Point Roberts, WA 1987

Toshio Odate, *Making Shoji*, Linden Publishing, Fresno, CA 2000

Hideo Sato, *Japanese Woodworking, A Handbook of Japanese Tool Use & Woodworking Techniques*, Hartley & Mars, Point Roberts, WA 1987

Kiosi Seike, *The Art of Japanese Joinery*, Weatherhill/Tankosha, New York, 1977

Jun'ichiro Tanizaki, *In Praise of Shadows*, Leet's Island Books, New Haven, CT, 1977

Jay van Ardsdale, *Shoji: How to Design, Build and Install Japanese Screens*, Kodansha International, Tokyo and New York, 1988

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Harvesting Your Own Trees?

If you are one of those woodworkers who likes to harvest your own trees, this video might give you a time-saving idea or two!

www.youtube.com/watch?v=w5OuztJBez4&feature=related

From the Chairman

By Michael Wallace

Well, here we are, just on the cusp of spring and what a winter we have had. If we don't get rain in March and April, it's going to be a tough year.

Michael Masumoto, Art Hofmann and I met with Eric Stanley, the historian curator at the museum, to start figuring out the processes that we are going use this year for the Artistry in Wood 2012 and to introduce Michael as Eric's "go-to guy" on all things show related. Our museum space will again be upstairs. Downstairs will be devoted to art-related exhibits. By the time you read this Forum, the big exhibit for the year "The Tsar's Cabinet" will be on. Looks like a fascinating exhibit.

You should have received your first dues notice. We're trying to see if email works. If we can use email we'll save money that can be used for other things like refreshments. If you haven't sent your check in, please do it as quickly as possible.

I just happened to be in Fort Bragg a couple of weekends ago and got saw the latest output from the students at the College of the Redwoods furniture program. It was a great exhibit. I got to meet many of our "northern" members as well as familiar faces like Ron Hock and Kevin Drake.

Michael Masumoto, Kai Herd and I introduced ourselves to many of the students. Their work is, of course, excellent. Many of them have true talent, and I expect that we will hear from them down the road. Laura Mays, the new Director of the school, was there. We had a chat and I found her captivating. Art has her lined up as a meeting speaker and a judge for this year's show.

We still have a lot of work to do this year. The By-Laws process is inching closer, and I hope we will have something to announce by the May meeting. Of course, the entire membership will be voting on the update and you will have an opportunity to review and respond to any of changes. Mike Burwen has identified some key points that need particular attention and some that just need updating - like the Article that says we will be doing the "Harvest Faire".

With our stretches of good weather, I do hope you're in the shop more this winter. I just finished up a mobile assembly table that I've been itching to get done since September! It's not perfect, but it will do for now.

See you at the next meeting!

Digital Workshop: CNC Machines

By Michael Wallace

This month's column is about CNC machines. To get us all on the same page, the following is the definition of a CNC machine from www.thefreedictionary.com:

"The method of controlling machines by the application of digital electronic computers and circuitry: Machine movements that are controlled by cams, gears, levers, or screws in conventional machines are directed by computers and digital circuitry in computer numerical control (CNC) machines."

I saw my first CNC machines at an automotive technology conference in the 1980's. I was transfixed watching these router-like devices cut into material to fabricate an object without human intervention. Since I was in the computer business, I wasn't totally unfamiliar with the all the components, but I had never seen a CNC machine up close. These machines can knock out exact copies in a very short time - amazing.



Thirty years later, CNC technology is relatively cheap and widely available. Today, you can buy a CNC machine for under \$3,000. While one this inexpensive may be limited compared with big industrial systems, it nonetheless has potential to change the landscape for woodworkers. In addition, the learning curve for using CNC has shrunk from months to hours. Today, you can buy these easy-to-use machines from places like Sears and Rockler.

Low-cost CNC machines are comprised of a platform that holds the piece to be machined, a mounting arm that holds a router, a cable that connects to your computer, software and a manual. Tres simple.

What can these machines do? The answer is "a lot." ShopBot, a leading seller of affordable CNC machines, says:

"For instance, precise-fitting assemblies that are difficult to produce using conventional tools can be created on the CNC. Dados, rabbets, arches, inlays and even 3D relief

carvings can be cut quickly and efficiently using CNC technology. Designs that are too time consuming or impossible to create using traditional woodworking tools are now possible."

These inexpensive machines have great potential to save the production woodworker time and money. For example, one of our SCWA Members bought one of these machines and eliminated the need to hire a helper!

What size of machine should you consider? There are sheet-sized CNC machines that cost \$25,000 - \$40,000, but "desktop machines" can cost less than \$2,500. The desktop unit might be a good starter tool. I think that's where Sear's \$1200 *CarveWright* machine fits. I was skeptical of this tool, until I saw Tommy MacDonald of *Rough Cut* used one to carve a panel for a box.

There are many sources of information about CNC machines available that will help you understand how they might fit into your business or hobby. American Woodworker magazine has a monthly column devoted to CNC machines, and their website www.americanwoodworker.com has lots of additional information.

Almost every woodworking machine vendor has released or soon will release CNC machines for the woodworker. As I noted before, Rockler now sells one, and I suspect that WoodCraft will soon as well. Laguna, General, Sears are some of the current vendors. ShopBot is a notable manufacturer of CNC machines that is now targeting woodworkers.

You do not need to go far to get some hands-on experience. The TechShop in Menlo Park has classes in learning how to use a CNC machine (<http://techshop.ws>). In addition, there are plenty of instructive on-line sites with videos.

One of the more interesting trends in CNC usage is its use by the DIY crowd. This mix of professional and amateur crafts people dabbles in all sorts of media from fabric to metal. The local *MakerFaire* (May 19, 20 - San Mateo Expo Center), will give you a good introduction to this movement. Some of these folks build their own CNC machines! If you haven't acquainted yourself with *Make* magazine, (makezine.com), you can pick up a copy at your favorite bookseller.

An extension of *Make*, though not affiliated with it, is the website www.instructables.com. This website is a treasure trove of projects, and there are several that explain how to build your own CNC machine. If you want more depth - www.buildyourcnc.com is a great resource for plans, links to vendors and forums on how to build, expand and use CNC machines.

Bottom line - CNC is here for the woodworker. Just as power tools revolutionized and popularized woodworking, so will CNC.

Next month - Some of my picks for the best websites.

About the Association

The *Sonoma County Woodworkers Association* is a 32-year old association of more than 100 professional and amateur woodworkers. Monthly meetings are held at member's shops and other venues to share experiences, ideas and techniques, and to hear well-known woodworkers discuss their work. Each year, the Association sponsors the *Artistry in Wood* juried exhibit at the Sonoma County Museum at which members are invited to submit pieces. Annual dues of \$25 cover membership for one calendar year

Wood Forum is the monthly newsletter of the Sonoma County Woodworkers Association. Please feel free to submit articles, notices, photographs, announcements and comments for inclusion in the publication. Advertisements are accepted with a per-entry cost of \$5 per column inch. Submit your entries to:

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Officers of the Association

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Artistry in Wood	Michael Matsumoto	869-1205
Librarian	Dennis Lashar	823-8471
Forum Editor	Michael Burwen	658-2844
Seminars	Bill Taft	794-8025

Membership Application

I would like to join the SCWA to meet other people interested in the craft, the art and the business of fine woodworking. Enclosed is my check in the amount of \$25 for the annual dues. I understand that this fee entitles me to attend monthly meetings and to receive the Wood Forum newsletter by email or via the SCWA's Web site.

Name _____ Email _____
Address _____ Address 2 _____
City, Zip _____ Home Phone _____
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Please send check and completed application to: Sonoma County Woodworkers Association, PO Box 4176, Santa Rosa, CA 95402

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