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AMERICAN WOODTURNER

Journal of the American Association of Woodturners

June 2013 vol 28, no 3 • woodturner.org

WOOD: KILN-DRIED, GREEN, OR AIR-DRIED?

LINE: AN ELEMENT OF DESIGN

DAVID WAHL: HONORARY LIFETIME MEMBER

Beth Ireland

My work reflects my life as a professional craftsman and artist.

I have always loved the meditative act of turning a pile of balusters, newel posts, columns or bowls. I am enthralled with the meaning we place on objects, whether it is a trinket given by a loved one that becomes magic through time and memory, a tool that performs a function, or an archeological object that reflects the life and skill of a maker from another time. These investigations inspire me to create. I am committed to promoting the act of making in our culture, and see empowering people through teaching as another aspect of creating.
—Beth Ireland

Beth Ireland will demonstrate at AAW's international symposium this June in Tampa.

Column glue-up, 2005, Cherry, 22" dia × 75" long (46cm × 190cm)

Photo: Jennifer Moller

Marla's Bowl, 2004, Walnut, polymer clay, brass, cord, 13" × 13" (33cm × 33cm)

Photo: Tom Nola

Untitled, 1996, Ebony, mahogany, veneers, 3" × 12" (8cm × 30cm)

Photo: Tom Nola

Untitled, 1999, Maple, epoxy, wisteria seeds, golf tees, bamboo skewers, 3" × 10" (8cm × 25cm)

Photo: Tom Nola

Turning a column, 2005, Cherry, 22" dia × 75" (46cm × 190cm)

Photo: Jennifer Moller

Windows, 2004, Cherry, epoxy, plastic, 3¾" × 8" (10cm × 20cm)

Photo: Tom Nola

Totem, 2011, Holly, cherry, 8" × 8" (20cm × 20cm)

Photo: John Carlano

Breathing Vessel, 2005, Spalted maple, poplar, dye, rubber cord, 24" × 16" (61cm × 41cm)

Photo: Tom Nola

Balusters, 2005, Mahogany, each one is 4" dia × 26" long (10cm × 66cm)

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Inside This Issue

June 2013 vol 28, no 3

FEATURES

AMERICAN WOODTURNER

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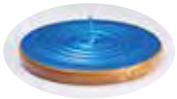
ASSOCIATION NEWS

WOODTURNERS CHATTER



GALLERY

COVER

Cover – Photo by Joshua Friend

Back Cover – Bill Haskell, *Crosscurrents*, 2013, Black walnut, 7½" × 3½" × 2½" (19cm × 9cm × 6cm)

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A NOTE ABOUT SAFETY

An accident at the lathe can happen with blinding suddenness; respiratory and other problems can build over years.

Take appropriate precautions when you turn. Safety guidelines are published online at woodturner.org/resources/safety.htm. Following them will help you continue to enjoy woodturning.

From the Editor

Is there something on your mind that you would like to share with your fellow AAW members? Perhaps a technique that helped you with a project or a viewpoint with which you may not agree? If so, send me a letter. The August issue of the journal will carry selected letters to the Editor. (Please note that letters may be edited for clarity and length.)

The feedback from Jerry Bennett's article in the April issue on copying still trickles into Jerry's and my inboxes. What he wrote soothed many previously jarred nerves and helped clarify the issue in a straightforward way.

For me, the most gratifying aspect of editing this journal is the connections I make with a wide variety of woodturning-related individuals all over the world. They share their stories and knowledge, which in turn helps others learn our craft. Read about a living example of sharing in Clay Foster's tribute to AAW's newest Honorary Lifetime Member, David Wahl. "What can I do for you?" is the thread woven throughout David's life, especially when he served on AAW's Board of Directors and as president of the Board. Congratulations, Dave!

There seems to be no end to the fun woodturners are having. To get a forkful, check out John Lucas's project article on how to make a spaghetti fork. Cook up a plateful of pasta and give it a whirl. Then, let me know how it all turned out. I hope to hear from you!

Betty Scarpino

—Betty Scarpino

Vacuum Chuck Seals

In vol 28, no 2, my editorial comment on Jeff Kieserman's article, "Permanent Seals for Vacuum Chucks," indicated his seal is "unique." Please note that an Internet search for "vacuum chuck seals" will list options for commercially made vacuum chuck seals. In addition, the spelling of the substance he uses is oogoo, not oogloo.

—Betty Scarpino, Editor

President's Letter

I recently visited the Woodturners Society of Queensland, Australia. The society is a chapter of the AAW, and they have their own building where they hold classes and share their woodturning knowledge five days a week. About two-thirds of the building contains lathes, drill presses, bandsaws, and grinders and the other third is used to host demonstrations. They also have a lunchroom and library for gatherings.

Several other chapters have similar centers. The Quad Cities Woodturners (QCW) in Rock Island, Illinois, rent a building from the city for a dollar a year. (They share the space with potters.) QCW members helped restore the building, and it is now full of lathes for woodturning demonstrations and hands-on classes.

My guess is that every local chapter would benefit from a dedicated space for woodturning. Be the catalyst to make that happen for your chapter.

Volunteer! The AAW has a strong record of volunteering, nationally and through its local chapters. The opportunities are limitless. Consider teaching woodturning at your local high school—members of the Nor-Cal chapter teach at Palmiter High School in Sacramento. The Cascade Woodturners teach at Franklin High School in Portland, Oregon.

Organize your chapter to make a project for the Chapter Collaborative Challenge for the AAW symposium. It is a great way to get everyone working together, teaching and learning. It is not too early to start planning a project for the 2014 symposium in Phoenix.

Host open shop days so that new turners can learn sharpening and turning techniques. These "saw duster" sessions improve retention of new members—beginners have a real hunger to learn how to turn. It doesn't have to be a big event, maybe just a few members. Gratitude from the new turners will reward your efforts.

Arrange for a woodturning exhibition at a local gallery, museum, or public space. John Hill helped organize exhibitions in Ashville, North Carolina, and at other sites around the country. John willingly offers help to other turners to set up exhibitions in their area. These exhibitions expose the wider world to woodturning art.

Organize and host an out-of-town demonstrator for your local chapter. It takes a lot of work to plan and organize a demonstration, but it is a great way to make lifelong friends. This is my twentieth year hosting out-of-town demonstrators in my shop and the seventh AAW symposium I have helped with. Through hosting and volunteering, my life has been enriched greatly with new friends. My woodturning "family" now covers the entire country and many places abroad.

When you help spread the art and craft of woodturning, fun things happen. Get involved locally. It will make your life richer.

I hope to see you in Tampa.

Dale Larson

Dale Larson,
AAW Board President

New Local AAW Chapters

Last year, seven new local chapters were formed. Congratulations to all of you who now have local-chapter support nearby! For information on local chapters, including how to start one, go to woodturner.org/community/chapters/.

Big Apple Woodturners, New York
The Enchanted Woodturners, New Mexico
North Valley Woodturners, California
Nova Woodturners Guild, Nova Scotia, Canada
Prince Edward Island Wood Turners Guild, Canada
Southside Woodturners Guild, Virginia
Taiwan Association of Woodturners, Republic of China

New Star Chapter 2012

We are pleased to recognize one new Star Chapter. To be a Star Chapter, all of the members must also be members of the AAW. Star Chapters receive a five-DVD set of *Masters of Woodturning*, a plaque recognizing Star status, a listing on woodturner.org/community/chapters, and an enthusiastic thank-you from the AAW.

Bay Lake Woodturners, Green Bay, Wisconsin

2013 Educational Opportunity Grant Program Awards

The Educational Opportunity Grant (EOG) committee is pleased to announce the winners of grants for 2013, which totaled nearly $36,000. The committee reviewed 117 requests from AAW local chapters, individuals, and other organizations that offer woodturning programs and opportunities. Winners' names can be seen at woodturner.org/resources/eog where you can also learn more about the program.

Money for the EOG program comes from the EOG auction held each year at the symposium banquet—no membership dues are used.

The AAW is dedicated to providing education, information, and organization to those interested in woodturning and is pleased to continue this highly successful program. We sincerely thank the artists who donate work, the buyers who bid on the pieces, and the many volunteers who help organize the banquet auction. Good luck to the recipients!

—Kurt Hertzog, Chair, EOG Committee

Tax-Free, Tax-Deductible Donations of Securities

If there were a way for you to support the AAW and take a charitable-gift tax deduction to reduce your income taxes and never have to pay capital gains on some of your appreciated-value stocks, bonds, or mutual funds, would you want to know more?

The AAW can now receive gifts of stocks, bonds, or mutual funds. The donor (you) gets a tax deduction for the full current value of the securities, not based on what you paid for them years ago. All capital gains taxes you would have had to pay if you had sold the securities would be forgiven, forever.

You can designate a securities donation to be used to build AAW's Memorial Endowment account, which provides income for woodturning education. Or, you can designate your gift to support a current project, such as AAW's new website overhaul.

It is simple to make a tax-deductible securities donation to the AAW. Just call the office (877-595-9094) and Phil McDonald will walk you through the process. It does not matter if your securities are held at a brokerage firm, a mutual fund company, or if you hold the certificates yourself. In 2013, and for individuals over 70½ years old, gifts from IRA's can go directly to charities. The donor does not have to pay taxes, and the donation counts toward required minimum distribution.

The AAW welcomes your support to help continue providing all of the great benefits to our members, now and into the future. This is a win/win opportunity for you and for the AAW. Call today.

—John Hill, AAW Endowment Trustee

Call for Demonstrators

AAW Symposium 2014
Deadline: October 15, 2013

The AAW's 28th annual international symposium will be held in Phoenix, Arizona, June 13-15. Visit the AAW website at woodturner.org/calendar for instructions on how to submit an application for demonstrating.

For additional information, call the AAW office in Saint Paul, 651-484-9094, or email, inquiries@woodturner.org.

AAW's Accessible Lathe Program

Dennis DeVendra

In 2011, Linda Ferber, AAW's program director, asked if I would participate in a program to promote turning for people who are visually impaired. At first I was a little shocked. Many view woodturning for people with disabilities as too dangerous. I was happy to share my experiences, however, in an effort to promote turning for those, like myself, who are turners with a visual impairment. I am blind.

The AAW is one of eleven arts organizations in the Twin Cities recently awarded a grant from Very Special Arts (VSA) Minnesota (vsamn.org) for projects to make the arts more accessible to people with disabilities. This article chronicles the work that has gone into AAW's Accessible Lathe Program.

Purpose and goals

The AAW received $15,000 to create curriculum materials and guidelines for instructors to use in assisting blind and low-vision community members to discover the craft of woodturning. Linda Ferber, leader of the project, and others also developed a list of resources and techniques to enable current woodturners experiencing vision loss to remain involved with woodturning. Work on the project included research, consultation, instructor training, and a pilot class to test and refine the curriculum. The curriculum materials will soon be available, free digitally, to AAW members and local chapters.

The program is not intended to be an instructional guide for woodturning—it assumes that program instructors and mentors know how to turn. The focus is to provide a bridge between what a sighted woodturner would do and the adaptations necessary to enable a person who is blind to successfully learn how to turn.

A major part of the program addresses concerns that family members, as well as other woodturners, have about people who are blind taking up woodturning. Mentoring and assistance from other turners is the key to learning for most people, sighted or not. Mentoring is even more important for a person who is blind because most instructional material is intended for people who can see. It is also important for a blind woodturner to have the support and encouragement of family members.

Visit to Saint Paul

I traveled to the AAW headquarters in Saint Paul three times to help accomplish the goals of the program. The first visit, in June 2012, was to establish the purpose, deliverables, and checklist for the remaining program requirements.

I met with Linda Ferber, her husband, Tom, and the videographer, William Meiklejohn. We reviewed the intent of the program and the schedules for the video work and decided my second visit, in October, would be for shooting video and pictures. We all agreed the program would address safety.

(Clockwise from top left) Dennis DeVendra, Gary Mrozak, and Jim Sannerud discuss grinder set-up.

One setup for a grinder is accomplished with a jig for measuring the distance from the wheel to the toolrest.

To adjust and set up a sharpening jig, a dowel is used to measure a preset distance so the angle on the tool's bevel will be correct.

A planned workbench layout ensures each item is available when needed. Small accessories are in a magnetic tray, which helps keep them in place.

Tool handles are notched one ring, two rings, etc., which identifies them for quick, accurate access. The tools are always replaced in the same order.

The following day, I met local professional woodturner Jim Sannerud, who would be working with me to put together the instructional materials. His shop is in an old warehouse on the banks of the Mississippi. Jim and his dog Jack spend most days turning in his studio when he is not teaching a turning class.

Instructional materials

Jim and I spent the day working on sharpening, one of the most difficult functions a blind turner performs. A sighted person will look for the sparks coming up over the tool tip to gauge sharpening. A blind person cannot see the sparks, and even the commercial jigs are not sufficient for people who are blind because they cannot see the adjustments needed to match the tool's bevel against the grinder wheel. Jim and I created jigs to augment his commercial sharpening system.

We dedicated day two to the actual class that would be outlined in the manual and started with basic spindle exercises, Jim as the instructor, me as the student. We went through each step in the class and talked about how I, as a blind person, would be able to participate.

As a part of the class instructions, we devised a simple workstation. For any woodturner, an organized work area is efficient and safe; for a person who is blind, it is essential. Some of the key elements of our workstation are: easy to set up, inexpensive, and able to hold all the tools and attachments outlined in the manual. The workstation will hold five basic turning tools. There is an open area in the middle for setup, a magnetic tray for holding small parts, and underneath there is plenty of room to store a faceshield and other turning equipment.

The lessons for the second day of class are about making functional items—Jim and I continued working through adaptations in order to create instructions for others to follow.

Finally, it was Jim's turn to try woodturning as a blind person. He blindfolded himself and turned a dibble. There were several eye-opening moments for Jim when he experienced some of the suggestions I had identified. For example, people who are blind usually will need to be in constant contact with the toolrest in order to know where they are in relation to the rotating wood.

Writing the manual

After returning home, I began writing the program manual, which is designed primarily for an experienced turner who would be working with a person who is blind. It focuses on the adaptations to be used for the blind woodturner, not on teaching turning. Safety is emphasized throughout.

The manual provides details for all the adaptations Jim and I developed: sharpening, setting up a workstation, measuring, centering, mounting a spindle blank onto the lathe, as well as two days of class materials.

The techniques in the manual are just a start. As with most activities in woodturning, there is more than one way to accomplish a task. The manual describes the approach Jim and I developed; we expect that other approaches will be developed and shared with others interested in opening their clubs to people who are blind. ▸

(Top) Measuring can be accomplished with a click ruler.

(Middle) An on/off foot-level switch is used for safety. When there is no foot pressure the machine is off. This type of switch can also be used for the grinder.

(Bottom) A student is learning how to turn a bead and is being shown the safe hand position for "seeing" the results.

(Right) Students learn how to turn a cylinder in three stages: First, they are given a pre-turned cylinder to attach to the lathe. Second, the corners of the block of wood they use are turned down. And third, they are given a rectangular block of wood. This exercise teaches how the cutting sounds and how the form feels.

Back to Saint Paul

In October, I returned to Saint Paul for the videos and photos: videos to outline and promote the Accessible Lathe Program; pictures to augment the text in the manual.

On Sunday, I demonstrated woodturning at the AAW Gallery of Wood Art. Many people stopped by to visit the museum and watch a woodturning demonstration. By happy coincidence, a reporter from the *Pioneer Press* (twincities.com) was there to do a feature on the gallery and referred to the Accessible Lathe Program in his article.

The remaining three days were filled with filming and taking pictures. Two members of the Minnesota Woodturners chapter, Gary Mrozek and Bruce Arones, spent the better part of the three days observing and participating in turning, and at the end of the filming, they provided testimonials of their impressions of the program.

Validating the work

In January, 2013, the third step of the Accessible Lathe Program took place: classes were held for local blind turners to validate the techniques described in the manual. This will provide information for another review of the manual to check for inconsistencies in terminology and fix other areas that need attention.

Keeping the momentum going

The Accessible Lathe Program is an ongoing effort, not just a one-time project. The Minnesota Woodturners Association and Mid Minnesota Association of Woodturners will continue the program in Saint Paul and St. Cloud, and we invite you to participate. As in any craft, there are many ways to accomplish the same goal. The materials we created are one approach for adapting turning for someone with a visual impairment; there are others.

During AAW's symposium in Tampa, we will be looking for feedback, through one-on-one exchanges. We also welcome comments on AAW's online forum. Already, I have been encouraged by feedback from people who have blind turners in their clubs.

Over the past year, the Accessible Lathe Program has been a dream come true. When I started turning, several well-intentioned people told me I would not be able to turn. I am sure many people with disabilities other than visual impairments have heard similar comments. Through this program, initiated by Linda Ferber and the AAW, people with a visual impairment are a few steps closer to being able to turn. It is my hope that turners who are losing their vision will continue turning wood. For those who are already visually impaired, this program provides the materials necessary to try this highly rewarding craft of turning wood. ■

Dennis DeVendra is a graduate of The Ohio State University. At age 21, he was diagnosed with a hereditary eye disease, retinitis pigmentosa, which left him with small crescent-shaped peripheral vision—not enough for much functional use. Dennis currently manages a staff of IT professionals at a utility company and is a yoga instructor. He started turning wood in 2006. For more information about Dennis, visit his website at blindwoodturner.com. Dennis will be a panelist on the Saturday afternoon panel, "Turners With Challenges," at the Tampa symposium.

David Wahl 2013 AAW Honorary Lifetime Member

Clay Foster

Is there anything I can do for you? —David Wahl

If you've known Dave Wahl for very long, these words are familiar. When Dave says them, it's not a perfunctory offhand comment, but a sincere desire to know how he can help. Two of Dave's joys in life are woodturning and helping people. When he can help woodturners, he is in heaven.

That's why Dave Wahl has been chosen as AAW's 2013 Honorary Lifetime Member. His legacy is not only what he has contributed to the AAW, but also what he has done for the family of woodturning. *Family* is the word Dave uses when talking about the woodturning community.

Dedication to the AAW and woodturning

Dave became interested in woodturning when he accompanied his wife, Suzy, to Arrowmont School of Arts and Crafts in Tennessee. He took a turning class; she took a fibers class. That experience began Dave's relationship with woodturning, woodturners, the AAW, and wood artists. Dave may not have the same notoriety as many of the wood artists who consider him a friend, but his impact on the world of woodturning is just as significant.

The maturation of the AAW from operating out of a cigar box on a card table to the multilevel organization it is ▸

Dave and Suzy Wahl in their "library."

today is the result of initiatives started fifteen years ago by Dave. When the AAW was created, the Board of Directors consisted of nine people who had a passion for woodturning, but who were neophytes at running a nonprofit organization. Hard work and enthusiasm took the association a long way, but eventually changes needed to be made.

> **“Dave made the demonstrators feel important when he was president. He commented once to me, ‘You can’t have a rock concert without the rock bands. You guys are our rock bands. We need to take care of you.’**
>
> —Binh Pho

The AAW was just ten years old when Dave became president of the Board. By that time, the association had outgrown its structure: There had never been a working budget and the profit-and-loss statement being used was not adequate for planning the organization’s future. Board member Larry Hasiak took on the herculean task of developing an accrual-basis annual budget when he became Board treasurer. Thanks to Larry’s hard work, Board members could track and project the income and expenses of every AAW program and service, and make informed decisions.

Creating the position of executive director was a pivotal event in the history of the AAW. When Dave first came onto the Board in 1997, he recognized that a constantly changing Board made up of volunteer members did not have the time, expertise, and continuity to offer new programs and better services to AAW members. Dave knew it was essential to make the transition from a working board that moved lathes around at the annual symposium to a planning board that set forth goals and created a vision for the organization. With planning, the Board could then charge a professional director to execute their objectives. There were bumps in the road on the long journey to the AAW’s current level of a professionally run nonprofit organization, and Dave will be the first to acknowledge that credit for arriving there belongs to a lot of people. His vision of a better way of doing things, though, began the journey.

Dave spearheaded other improvements to the AAW while he was on the Board from 1997 to 2000. Not only did he serve as president for two terms, he wrote and obtained AAW’s first corporate sponsorship grant for $10,000 from the Bank of America for the Charlotte symposium and youth education. He requested that all committee chairs develop and write the duties, responsibilities, procedures, and guidelines for their committees. He asked Board officers to do the same for their positions. During those years, the Board accomplished much internal structuring for the organization because of the cooperation, support, and hard work of everyone involved.

Dave was diligent about taking good care of demonstrators at AAW’s yearly symposium. Binh Pho recalls his gracious hospitality: “Dave made the demonstrators feel important when he was president. He commented once to me, ‘You can’t have a rock concert without the rock bands. You guys are our rock bands. We need to take care of you.’”

Dave’s woodturning family

Many other things Dave did for the woodturning family deserve recognition. He was president of the St. Louis AAW chapter, and helped organize one of the first regional symposiums there. He helped Bill Sullivan start the Woodturners of South West Florida chapter in Fort Myers.

Dave is also a founding member of the Collectors of Wood Art (CWA), and organized the CWA Forum in Santa Fe. As an active CWA member, Dave works to get more galleries and museums to show art that has wood elements.

His promotion of woodturning and wood art is tireless. When asked how Dave helped the newly formed Patina Gallery in Santa Fe get involved with wood art, co-owner Allison Barnett said, “The first thing that comes to mind is how David took us into the fold of woodturning. He heard about us opening the gallery and we heard about him through John Jordan. David came into the gallery while the space was under construction and we were setting up. He introduced himself and we made plans to have dinner. During the meal, he and Suzy told us we needed to show wood. We went back to Dave and Suzy’s house and they showed us the Wornick Collection book and asked us to pick out work we loved. They then put in a good word for us with the artists. What an entrée they created for us with these artists! He took us under his wing and taught me everything I know about wood. I love the material and I love David. He is one of the most gregarious and open-hearted men I know and I just adore him and his spirit!”

Ivan Barnett, Allison’s husband and co-owner of Patina Gallery, recalls that whenever the gallery would have an exhibition of turned art, Dave would attend. Mingling with guests, Dave educated patrons about woodturning. “Do you know how this was done?” he would ask. Or, “This artist lives near here, and her work is influenced by the desert environment. Can you see it?”

Dave played no favorites at a time when competitiveness was at its height among galleries. If a gallery showed turned art, the owners were Dave’s friends. He has a talent for deflecting and diffusing conflict among galleries, artists, wood-art

organizations, conference facility managers, and even AAW members.

Turning wood

An accomplished woodturner in his own right, Dave enjoys making vessels from woods local to him, such as piñon pine. Turned thin, the piñon glows with a warm translucence. Influenced by Ray Key and Bob Stocksdale, Dave prefers simple, clean shapes that don't compete for attention with the color and grain of the wood.

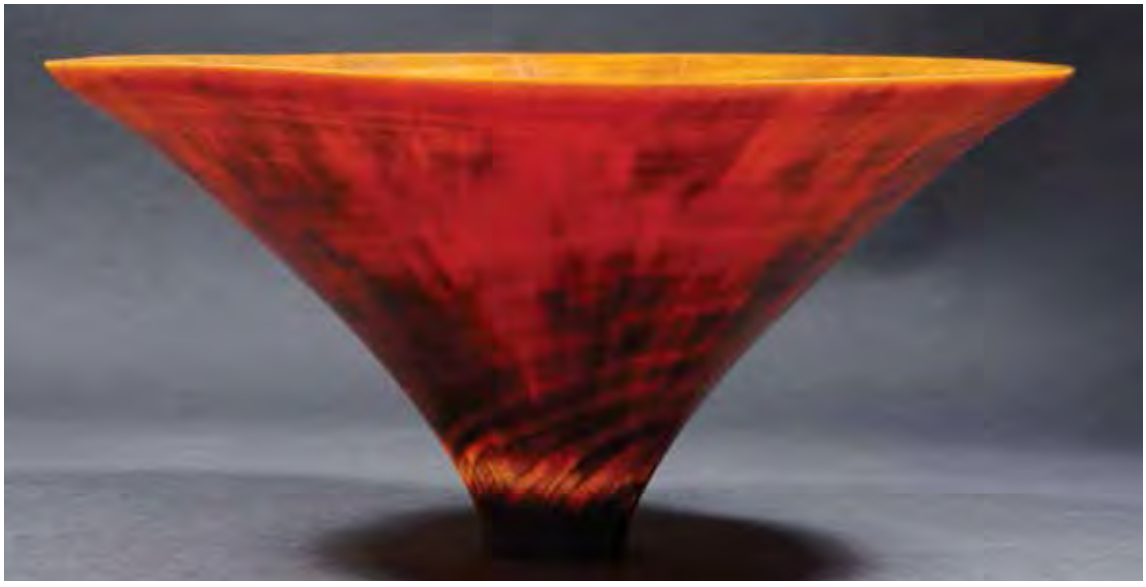
Hospitality

Dave and Suzy's home is always open to any woodturner, artist, collector, museum director, or a friend of a friend. The Wahl Home For Wayward Artists has been in continual operation for almost twenty years. There have been times the pillows on the beds barely cooled off before another guest arrived. And there were very few times that a visiting collector, gallery owner, or museum director didn't get a turning lesson in Dave's shop. Dave says, "The most fun about being an AAW member is helping and teaching beginners to turn and seeing the look on their faces at their first success."

This brings up an oversight: The 2013 recipient of the Honorary Lifetime Member shouldn't be just Dave Wahl; Suzy Wahl completes the package deal. In fact, they should just change their name to *DaveandSuzy*, because that's how friends refer to them. It's a rare occasion to see one without the other. Suzy keeps Dave's exuberance for new adventures grounded in reality, and Dave is delighted when Suzy raises money for the EOG fund at the annual symposium auction by raising the bid on anything that collector, Arthur Mason is bidding on. Whenever Dave's distinctive laugh can be heard, you know something fun is happening.

Woodturner, wood-art lover, wood-turning promoter, and AAW organizer are all words that depict Dave Wahl. But the words that describe him most accurately are: helper and lover of people. And, if you are a woodturner, Dave loves you most of all. He wants to know what he can do to help you. ■

Clay Foster is a studio artist in Indianapolis, Indiana. He is a former vice president of the AAW and a founding member. He is AAW member #50.



Sanibel Norfolk Island Pine, 4½" × 9½" (11cm × 24cm)

(Right) Santa Fe Piñon Pine, 4" × 7½" (10cm × 19cm)

(Left) Sanibel Norfolk Island Pine, 8" × 9" (20cm × 23cm)

It's Going to Happen

Dennis Belcher

Due to the nature of what we do, accidents will happen. We use machines designed to cut wood but that cut flesh just as easily. Surgically sharp blades cut fifty-pound chucks of wood that revolve at hundreds of revolutions per minute. Noise levels are guaranteed to cause hearing loss over time. The ever-present dust is in the air we breathe. All these things make what we do potentially dangerous.

The AAW devotes a great deal of energy and resources to educating turners how to work safely. Even so, accidents will still happen. Last year I gave a presentation to my local chapter (the Wilmington Area Woodturners) on the topic of *Turning 'til 90*. My purpose was to increase the awareness of safe practices so that woodturners could continue to turn safely over long periods of time. At the end of my presentation, I handed out a quiz I think every woodturner should fill out and post in his or her shop. For an electronic version, go to the AAW's website at woodturner.org/products/aw. Print a copy today for use in your shop!

This quiz has two intents: First, to increase awareness of what needs to happen after an accident occurs. A little advance preparation goes a long way to minimize the consequences of an accident, which will get us back into the shop that much faster. Second, the quiz can make us notice some of the less obvious things we need to do to be safe.

My challenge to you is to make a copy of the quiz, take it to your shop, and complete each question. Take corrective action on those items you realize need to be improved. Bad habits can be changed, but only if we stop to consider the things we do that may be unsafe. ■

It's Going to Happen Quiz

The nearest phone to use in an emergency is_____.

Nearest hospital approved by my insurance carrier is _____.

Nearest urgent-care facility approved by my insurance carrier _____.

Ambulance service closest to my home is_____ . They are___minutes away.

I summon an ambulance by calling _____.

If I need help in the shop from my spouse or neighbor, I call_____.

My shop fire extinguisher is located_____.

The charge of my fire extinguisher was last checked on _____.

I regard my dust collection system as: ❑ inadequate ❑ adequate ❑ good ❑ superb

I consistently wear hearing protection in my shop. ❑ yes ❑ no

The electrical service/supply in my shop is: ❑ inadequate ❑ adequate

My plan if I develop an allergic reaction to a wood species is _____.

I have a faceshield. ❑ yes ❑ no

I wear a faceshield or safety glasses/goggles when I turn. ❑ never ❑ sometimes ❑ always

I wear a dust mask or dust helmet when I turn. ❑ yes ❑ no

I consistently use properly sized tools for each project (large tools for larger pieces, small tools for small projects). ❑ never ❑ sometimes ❑ always

I have reviewed the "near" accidents I have experienced on each machine that I own. ❑ yes ❑ no

I know and stay out of the "line of fire" for my lathe. ❑ yes ❑ no

I sit in the line of fire when watching a demonstration. ❑ yes ❑ no

I have a safety stop for my lathe that is out of the line of fire. ❑ yes ❑ no

I use the tailstock when roughing out. ❑ never ❑ sometimes ❑ always

I use the tailstock when turning out-of-round pieces. ❑ never ❑ sometimes ❑ always

The tool in my shop on which I most need to improve/change/review my work habits from a safety standpoint is _____.

I use a safety shield to protect spectators when doing a demonstration. ❑ yes ❑ no

I clean and organize my shop regularly. ❑ yes ❑ no

The woodturning tool that I am most afraid of is_____.

I need to change my use of _____to improve safe work habits.

My body clock makes_____ the most dangerous time of the day to work with power tools.

The one thing that I should do to improve the safety of my shop is _____

_____.

Calendar of Events

August issue deadline: June 15

Send information to editorscarpino@gmail.com

France

June 17–23, AFTAB (French Association for Artistic Woodturning) collaboration seminar, held at the Escoulen Woodturning School in a small village in the south of France. Fifty artists will collaborate and all work will be auctioned. For additional information visit aftab-asso.com/html/collaboration2013.html. To register, contact Alain Mailland, aiguines2013@aftab-asso.com.

Ireland

September 27-29, Irish Woodturners' Guild National Woodturning Seminar, Radisson Blu Hotel & Spa, Sligo, west of Dublin. Featured demonstrators include Joe Laird and Robert O'Connor, Ireland, Dennis Keeling, Joey Richardson, Les Thorne, England, and Marcel van Berkel, Holland. More details are available from irishwoodturnersguild.com.

California

August 31–September 29, "Artistry in Wood," Sonoma County Museum, Santa Rosa. The exhibit showcases work by woodworkers from northern California and includes turning. For more information and entry forms, visit sonomawoodworkers.com.

Colorado

September 13–15, Rocky Mountain Woodturning Symposium, held at The Ranch, Larimer County Fairgrounds. Demonstrators include David Ellsworth, Kip Christensen, Kirk DeHeer, Jason Schneider, Michael Blankenship, Rick Orr, John Giem, Ashley Harwood, Binh Pho, and Dale Bonertz. For the latest information, visit rmwoodturningsymposium.com.

Connecticut

May 17–August 18, "Conversations With Wood: Selections from the Waterbury Collection," Yale University Art Gallery, New Haven. artgallery.yale.edu

Florida

June 28–30, AAW's 27th international woodturning symposium, Tampa. For more information, visit woodturner.org.

Georgia

September 20–22, Turning Southern Style XIX, at our new location, the Northwest Georgia Trade and Convention Center in Dalton. Demonstrators include Cindy Drozda, Stuart Mortimer, Jerry Kermode, David Nittmann, Nick Cook, and Kirk DeHeer. Our larger vendor area will feature discussions and demonstrations by Mike Hunter, Lyle Jamieson, John Jordan, JoHannes Michelsen, Tom Steyer, and Doug Thompson. Activities include a hands-on area, Instant Gallery and critique session, banquet and auction, and a spouse lounge and optional spouse outing. Information is available at gawoodturner.org.

Massachusetts

April 7–September 15, "Across the Grain: Turned and Carved Wood," Fuller Craft Museum, Brockton. For more information, visit fullercraft.org.

Minnesota

February 28–June 30, "Around the Hus: Traditional Woodenware from Scandinavia."

Ongoing exhibit is "Touch This!" featuring fascinating facts about wood and woodturning, as well as pieces you can touch. For more information, visit galleryofwoodart.org.

Montana

September 28–29, Yellowstone Woodturners Symposium, Billings. Rex Burningham will demonstrate. For further information, call Dr. Van at 406-245-9945, or visit yellowstoneturners.org.

North Carolina

November 1–3, North Carolina woodturning symposium, Greensboro Coliseum Special Events Center. Featured demonstrators include Jimmy Clewes, Douglas J. Fisher, Bob Rosand, Avelino Samuel, Keith Tompkins, and Molly Winton. Seven regional demonstrators will also present. Visit northcarolinawoodturning.com for developing information.

Ohio

October 11–13, Ohio Valley Woodturners Guild's Turning 2013 symposium, Cincinnati. Demonstrators include Ray Key, Christian Burchard, Steve Kennard, Glenn Lucas, Michael Hosaluk, and Nick Agar. For more information, visit ovwg.org.

Michael Gibson, *Ripples,* 2013, Pear, acrylic paint, 3" × 10" (8cm × 25cm)

Ripples is in the "Currents" exhibit, showcasing at AAW's international symposium in Tampa this June.

Tennessee

January 31–February 1, 2014, Tennessee Association of Woodturners 27th woodturning symposium, Marriott Hotel, Cool Springs, Franklin (just south of Nashville). Featured demonstrators include Trent Bosch, Barbara Dill, Douglas Fisher, and Kurt Hertzog. Details can be found at tnwoodturners.org. For vendor information, email mine@tds.net.

Texas

August 23–25, Southwest Association of Turners (SWAT) Symposium, Texas Convention Center, Waco. Fifty-four rotations will feature lead turners Jimmy Clewes, Ashley Harwood, Marilyn Campbell, Donald Derry, Dixie Biggs, and J. Paul Fennell, plus regional demonstrators. Vendors, hands-on areas, Instant Gallery, and lunches are included. Beads of Courage boxes will be accepted for distribution to regional hospitals. For more information and to register early, visit SWATurners.org.

Washington

July 27, Creativity in Woodturning symposium, Lacey. Featured demonstrator is John Jordan and local-guest demonstrator is Jack Wayne. The event will be followed by four days of hands-on classes with Jordan. For additional information, visit woodturnersofolympia.org or contact Al Price aprice44@aol.com.

Tips

Depth gauge for bowls

To use this shopmade depth gauge, first measure the overall thickness of the wood. The inch markings on the stem of the gauge will then help in determining the depth to turn.

Another way to use the gauge is to place the stem inside the bowl and loosen the thumbscrew so the stem hits the bottom of the bowl. Then, place the side arm of the gauge on the rim of the bowl and slide the pencil down. You can then make a mark the outside of the bowl.

—Robert Gaynes, Pennsylvania

Extended jaw tips

I love my jumbo jaws when reverse chucking a large vessel to finish the bottom, but all too often the rubber tips that come with it are just too short for some of my oddly shaped edges. In looking for a suitable solution, a simple and readily available item came to mind—a wine bottle cork—not the actual cork kind, but the synthetic stoppers made from plastic compounds. They have the correct properties and the size is perfect. You could probably even stack them using a longer bolt for taller applications.

I drilled a ¼" (6mm) hole through the middle of the stopper (which is 1¾" [44mm] long) and inserted a 2¼"- (57mm-) long bolt. Make sure you use the right thread match for your particular jaws and use washers to help spread the pressure across the stopper end.

I also have a set of stoppers with the holes drilled off center for use with warped or slightly odd-shaped vessels—simply turn the stopper to achieve a snug fit. I have used these stoppers for a number of turning applications, and their non-marking surface is excellent for already finished edges.

Do not drink the wine until after you finish your turning session.

—Michael J. Colella, Maryland

Two tenons get the job done

Working with large pieces can be a challenge: Hollowing and/or coring a large piece can be done effectively by making two tenons. I have turned both a 5" (13cm) and 2½" (6cm) tenon on a large piece of red eucalyptus before coring. I can use the large tenon for grabbing the wood while hollowing or coring using large 5" chuck jaws. The large tenon will hold the piece firmly with little or no vibration.

When the big job is complete, I switch to a smaller chuck for finishing the base and use the smaller tenon. The larger tenon can now be easily cut away.

—Art Worth, Florida

Share your turning ideas!

If we publish your tip, we'll pay you $35. Email your tips along with relevant photos or illustrations to editorscarpino@gmail.com.

—Betty Scarpino, Editor

Tool holder

On several occasions I have seen excellent tool holders in *American Woodturner*. They inspired me to make one for my small shop. It is mounted on a five-drawer cabinet that allows it to be mobile. This holder can accommodate forty-seven tools in a space that is 21½" (55cm) in diameter.

It is built on 12" (30cm) lazy Susan hardware, which allows access to any tool without moving from the lathe. The frame has a ½" (13mm) plywood base and has twenty-four 1⅝" (42mm) PVC thin-wall tubes on the lower level. These accommodate smaller-handled tools. Twenty-three 1⅞" (48mm) PVC tubes on the upper level hold larger tools. The tubes are held in place with two dabs of five-minute epoxy.

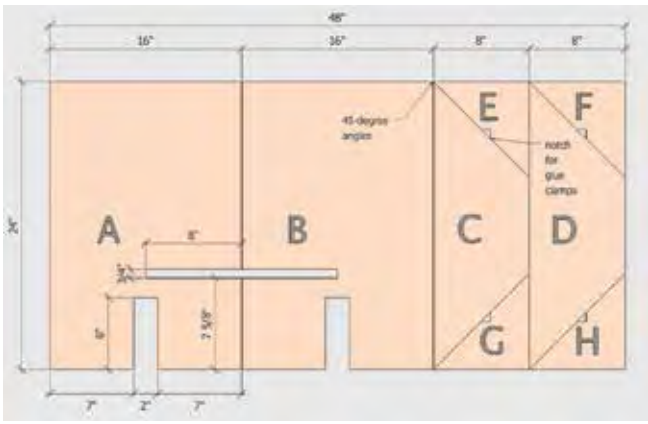
—Sam Sampedro, Montana

Easy-to-use sawhorse

When the pieces for constructing this sawhorse are cut out from a quarter-sheet of ¾" (20mm) exterior-grade plywood, all that is left is sawdust. I used Titebond II glue and two screws in each of the four triangle supports. For added strength, glue a 1½" × 1½" (40mm) board lengthwise along the center section at the top and bottom after assembly.

Precision in cutting out the pieces (except for the ¾" slots) is not essential.

—Chet Brisco, California



Sanding drum

In making some kitchenware for the holidays, I needed a drum sander for sanding part of my stirring sticks. I had first turned and sanded the handles and then bandsawed the curve from the remaining rectangular stock. Rather than hand sand the cut marks, I grabbed a 4" (10cm) cardboard tube and outfitted it with a length of double-sided tape and a piece of 150-grit abrasive. Luckily, the tube had plastic ends, which my chuck could clamp and my tailstock neatly fit into. Mailing tubes could probably be outfitted with wood pieces glued into the ends.

Make sure the abrasive is oriented so the extra flap from the length of the paper trails away from the piece. For ease of control and to see what is happening, hold the curve under the drum with gentle pressure and use a pulling motion. ▸

—Robert Bernardi, New York

Long thin spindles

When turning thin spindles, approximately ⅛" to ¼" (3 to 6mm) diameter, it's difficult to finish them between centers: The pressure from being mounted between centers makes them bow and climb up on the cutting tool. The ideal setup would be to have a chuck on the tailstock, as well as the headstock, to provide tension on the spindle rather than compression. Since I don't have a chuck that will mount onto my tailstock, much less a draw-bolt style live center for the taper, I've come up with a way to provide more rigidity with the accessories I have.

Using a conventional setup, mount a turning blank onto the lathe.

Turn a ½"-diameter tenon on the headstock end to fit into the small jaws of a chuck.

Turn a tapered tenon on the tailstock end that will fit into the taper on a live center. The center pin can easily be removed.

First, I turn an approximately ½"-(13mm-) diameter tenon on one end of the rough spindle to fit the small jaws of a chuck. This provides rigidity on the headstock end of the spindle.

Next, I turn a tapered tenon on the tailstock end of the spindle, sized to fit the internal taper of the tailstock center of my JET 1014. The center pin is secured with a taper and is easily removed with a knockout bar. The center can still be used as a cup center, but I use the taper rather than the cup to provide rigidity for thin spindles.

This setup provides nearly all the rigidity needed to turn spindles thin, from 2" to 10" (50 to 250mm) long. A string steady might work well, but I find that backing up spindles, even as small as ⅛" (3mm) in diameter, with my fingers, is sufficient.

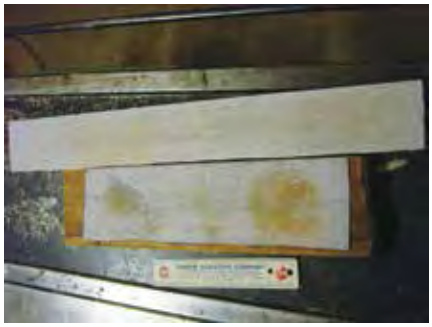
—Jim Underwood, Georgia

Insert the tapered tenon into the tailstock's live center.

Long, thin spindles can easily be turned ...

... into knitting needles.

Sanding board



David Lutrick's tip (vol 27, no 6) for making a board for flattening the rims of bowls reminded me of a similar device recommended by Ray Allen in *Wood Turning with Ray Allen* by Dale Nish. Allen's sanding board was made by adhering a strip of abrasive to a stiff, flat board, such as plywood.

Using abrasives in roll form with pressure-sensitive adhesive allows you to make any length sanding board, rather than being limited by the size of a belt from a belt sander. I have made boards up to 18" (45cm) long—they work well for truing the faces of segmented rings, bowls, and waste blocks.

As an alternate method, use any piece of abrasive and use a double-stick tape to stick it to a board. Be sure your board is flat and dust-free before adhering the abrasive. And, as Lutrick mentioned, use good dust-collection when sanding.

Such a device also is useful for flattening small objects by hand. For bottle stopper tops, the sanding board is perfect for removing a small rim left because of mounting to a screw chuck. Simply draw the stopper top down the length of the board several times, turning it frequently to maintain uniform sanding.

—Todd Williams, Minnesota

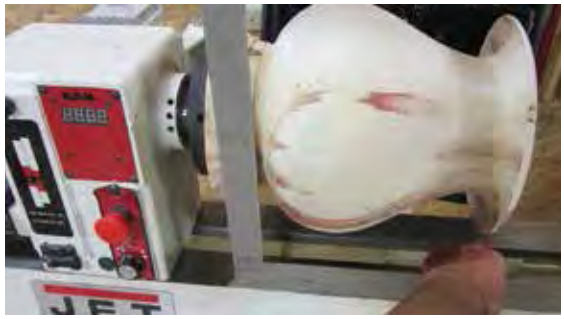
Find the depth once and finish

I have found a simple way to mark the depth of a hollow vessel so I know where the bottom is without repeated measuring. I use this method when I am finished hollowing the interior and ready to finish the exterior bottom to part the vessel off the lathe.

1) Place a framing square on the bed ways with the long edge parallel and flush with the edge of the bed. The short edge should be touching the opening of the vessel. Put a piece of masking tape on the bed. Using a pencil, mark on the tape the location of the corner of the square.
2) Measure the depth of the vessel using a dowel rod. Starting from the pencil mark, measure the same distance along the lathe bed and at that place, adhere another piece of tape. With a pencil, mark on the tape the depth of the vessel.

Now, whenever you want to check for depth, just put the square on the bed flush with the edge and located on the pencil mark. The vertical leg of the square will indicate the depth of the inside bottom of the vessel and you can proceed to finish the bottom of the vessel.

—Michael Cyr, Massachusetts



Adjustable light stand for a JET

I have a JET lathe that came with a safety cage that I don't use; however, I use the safety-cage bracket for a sliding light stand. First, place a couple of washers between the bracket and the lathe. This will allow the sliding bar to pass behind the electronic control knob without hitting it.

I bought a 3' (90cm) length of W-1 drill rod, 47/64" (18.5mm) diameter, from mscdirect.com, item #04966255 (¾" [19mm] will not fit). I then drilled the appropriate-size holes every 6" (15cm) down the length of the rod for the spring plunger on the bracket. Next, I welded a square steel plate to the end of the rod, the size I needed for my light, about 5" (13cm) square. I use a light that has a magnetic base—it will stay put and I can shine the light where it's needed.

—Michael Cyr, Massachusetts

Nail polish

After I turned a bowl, several cracks appeared in the rim. They responded well to CA glue, but then the cracks showed. I wanted something that would cover them to save the bowl, and I thought of nail polish—after all, it is lacquer that leaves a smooth, shiny finish. I had already colored part of the rim lavender and the red nail polish went well with that.

I had also wanted something sparkly for tree ornaments. I tried gluing glitter to them with a thinned-down glue mixture, but the glitter was obtrusive and also brushed off. Why not nail polish with glitter in it? I visited the dollar store and voilà—I discovered a large supply of colors with or without sparkles for a dollar a bottle. And, the bottles come with a brush and airtight lid. I think nail polish can have any number of applications.

—Pat Thobe, North Carolina

Book Review: *Hogbin on Woodturning: Masterful Projects Uniting Purpose, Form & Technique* by Stephen Hogbin

THIS is the book woodturners have been waiting for!

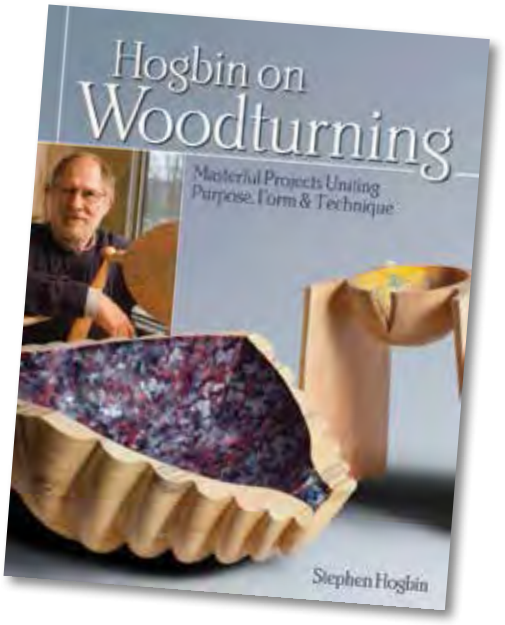
Hogbin's fourth book on design and methods of work offers an equal balance of projects, procedures, design, and philosophy. Standard turning techniques are transformed into a cornucopia of ideas that challenge us to think creatively, and encourage even those who don't consider themselves creative. It is a masterful approach that unites the reader with the concepts of inspiration and design, and makes them accessible.

For those not familiar with Stephen Hogbin's work, in the early 1970s, he was the first to explore the idea of cutting turned objects apart and then reassembling them into sculptural forms. His *Walking Bowls* are iconic. Hogbin, Giles Gilson, and Mark Lindquist received the first Merit Awards given by the POP Committee in 2007.

Walking Bowl, 2012, Maple, paint, 16" (40cm) tall
Photo: Michael McLuhan

Walking Bowl will be in an exhibit, along with other works from the book, at The Center for Art in Wood, Philadelphia, fall 2013.

Hogbin's background is in industrial design. He studied with the acclaimed author and woodworker David Pye, and received his degree from the Royal Academy of Art in London in 1964 before emigrating to Ontario, Canada, in 1968 to teach at Sheridan College. He opened his own studio in 1971 and began accepting private and public commissions making furniture, sculpture, and architectural installations, all focused on construction principles that relate directly to the lathe. His influence on contemporary woodturners has been extraordinary, particularly segmented turners.



Craft is about story, and this text uniquely engages the reader in a conversation about the origins of an idea, explorations of its value, methods used to translate ideas into objects, why certain methods are chosen, how relationships are formed with clients to best serve their interests, and lessons learned. We learn the importance of making mistakes and how an idea for one object can lead to a variety of new objects. In effect, Hogbin is subtly saying, *Okay, take an idea, any idea, then go out and engage in your own thought process and see what comes of it.*

The projects Hogbin explores have all been turned, cut open, and reassembled into sculptural forms. Most involve the thoughtful integration of natural wood grain with accents of color. They include: several tables and a set of dining chairs, platters, numerous sets of salad servers, fluted bowls, asymmetrical bowls, bowls made from spindles, dancing bowls, sculptural trivets, a towel rack, a knife rack, cabinet drawer pulls, an egg cup, four walking canes, five walking bowls, six bowls in motion, seven candleholders, eight lovely stools, and a wonderfully amusing Karmann Ghia dustpan. Whew!

An ingenious sense of mystery has always characterized Hogbin's work—one cannot help but think, *How in the world does he make these things?* Admittedly, I was somewhat concerned that by providing numerous informative photos and descriptions of processes, some of that mystery might be lost. But not so. Instead, the reader becomes an integral part of the story.

Hasari Pal's expression, "All that is not given is lost" summarizes the contents of this most inspirational read. ■

—David Ellsworth

Fox Chapel Publishing, 2013

Dust Mask

Ken Rizza

I purchased high-impact Pyramex Capstone goggles with faceshield from OpticsPlanet Inc. (SKU yx-GG-GG504Tshield, $19.95). The faceshield has a thick polycarbonate lens with protective tear-offs, flips up and down, and is tough—it will deflect more impact than a flimsy faceshield—yet is lightweight. And, I can wear prescription glasses under it. Fresh air to avoid woodturning dust was lacking, so I retrofitted the mask.

To begin, I bored a small hole in the front of the faceshield so I could use parts from an old continuous positive airway pressure (CPAP) machine to retrofit the mask. I used the connecting hose and the fitting that goes into the CPAP machine's nosepiece section from the headgear parts. Almost any CPAP headgear design (and there are several) will have similar parts that could be used. For mine, I pushed the headgear retainer ring into the slightly smaller hole I drilled in the mask. The hose connection clicks in and stays in place. When I walk around my shop, I can simply pull the hose out and then push it back in when I return.

I was going to build a box to hold the machine, but instead bought a plastic container with a snap-on lid. I bored a hole in the end of the container at the same height as the hose that comes out of the machine. To seal the connection, I put duct tape on both sides of the hole and cut a snug opening for the hose end to push through and connect to the machine. For the electrical cord, I cut a slit in the box, ran the cord through it, and sealed the opening with duct tape.

The CPAP machine has a small filter, but I wanted additional filtration and ventilation, so I cut a sizable square hole in the lid of the container and duct-taped in some filter material (also from a CPAP machine). Any appropriate air-filtering material would work. The final touch was to add an extra length of hose with a coupling.

To solve the on/off problem—the switch is on the back of the CPAP machine—I left the machine's switch in the on position and wired a wall switch into the cord, which I mounted under the unit. The container with the CPAP machine is mounted on a shelf next to my tool rack.

I get a nice clean breeze of filtered fresh air blowing on my face and no lens fog. If you don't have an old CPAP machine lying around, check with your friends or look on eBay—you might just find one. My helmet works well and only cost about $20. ■

Ken Rizza and his dust mask/faceshield.

The air hose easily clicks into the retainer ring.

The breathing tube and headgear are from a CPAP machine.

The unit is mounted on a shelf near the lathe and turning tools. The switch is positioned just below the unit.

A filter added to the lid of the container provides additional air filtration.

Ken Rizza is a mortgage banker and has been turning since 2007. His neighbors call him the "go-to guy."

Wood:
Kiln-Dried, Green, or Air-Dried?

Joshua Friend

There is one truth that all woodturners come to understand: When freshly cut, trees are full of water and the moisture-laden lumber is unstable as it dries. This fact determines much about the working properties of our raw material and dictates some processes woodturners employ.

To explain in simple terms, in freshly cut (green) wood, water occurs in two forms: *free* and *bound*. The free water resides in the cell cavities and is first to evaporate—or be slung about your shop while you are turning green wood. The loss of free water does not cause wood to change shape or crack.

Bound water exists within the cell walls and evaporates after the free water is gone. When the bound water begins to evaporate, the wood does most of its shrinking (as the cells collapse), causing the wood to change shape and possibly crack. Thus, high moisture content necessitates some form of drying process to stabilize wood, either before or after turning on the lathe.

Although wood is not alive after being cut, it may seem so because wood is hygroscopic—it continues to absorb and lose moisture as the relative humidity changes. Understanding the nature of wood will help you understand the options available for acquiring this material we enjoy turning.

(Above) The inside of a vacuum kiln (top has been removed) shows slab material that has been dried. This kiln at Berkshire Products in Sheffield, Massachusetts, can dry up to about 2,000 board feet of lumber in only a few days. Boards are layered in the kiln and separated by heated aluminum plates.

Kiln-dried lumber

When you buy lumber from a lumberyard or hardwood dealer, most often it has been dried in a kiln. This is the fastest way to dry wood after it has been rough sawn. In as short as a week, depending on the type of wood and the kiln being used, dimensional lumber will be ready to turn. Kiln-dried lumber is dried to about 6 to 9 percent moisture content, which makes the wood stable. Even so, the wood might need to be acclimated to the humidity of your shop before working it.

Wood kilns operate much like a convection oven, making use of some type of heat source and a fan to move the air. There are a number of different types of kilns—vacuum, dehumidification, and solar—but the purpose is the same for all of them: to speed up the process of evaporation of bound water from the wood, thereby stabilizing it. For woodturners, the stability of dried wood—whether kiln-dried or air-dried—makes it suitable for all kinds of glue-ups prior to turning, such as in segmented work. Kiln-dried wood is also used for spindle work and for small projects, such as pens.

Some kiln operators also infuse water into the process, commonly when drying walnut. Doing so moves some of the dark color of the heartwood into the sapwood, thereby making the overall color of the board more uniform, which many furniture companies prefer. This process also increases the amount of wood that can be used. On the downside, the process tends to homogenize the wood, making it less interesting. Also, applying heat and steam changes the quality of the wood, making it harder and more brittle. This is why turning kiln-dried wood dulls tools faster and produces a "dusty" cut.

One key limitation of kiln-dried stock for woodturners is the thickness of the wood that can be dried: It is difficult to sufficiently dry timber much thicker than 4" (10cm). Kiln-dried lumber is well suited for woodworkers who use boards (planks or slabs) to make projects that do not require thicker material.

Carl Ford, untitled (natural-edge bowl), 2003, Ash, 6½" × 12" (17 cm × 30 cm)

Carl Ford, untitled (beaded-rim big-mouth vase), 2009, Ash, 7" × 6" (18 cm × 15 cm)

But for turners, using kiln-dried lumber limits faceplate work to shallow bowls and platters (unless you glue up stock to make thicker turning blanks).

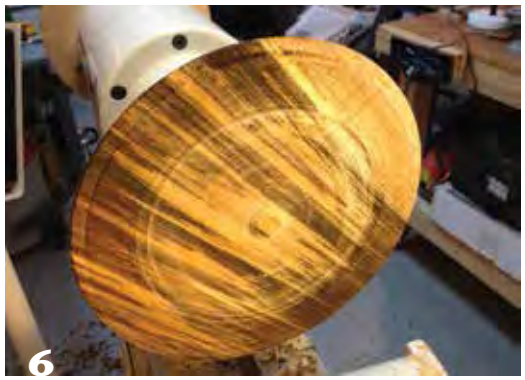
Green wood

If you have not yet experienced the joys of turning green wood (freshly cut timber saturated with moisture), you are missing out on a fantastic experience. Many woodturning projects become fun by using green wood instead of dimensional lumber. For example, if you want to turn a large, deep bowl without laminating layers of boards together to create sizable turning blanks, using green wood is the answer. A natural-edge bowl with the bark remaining on ▸

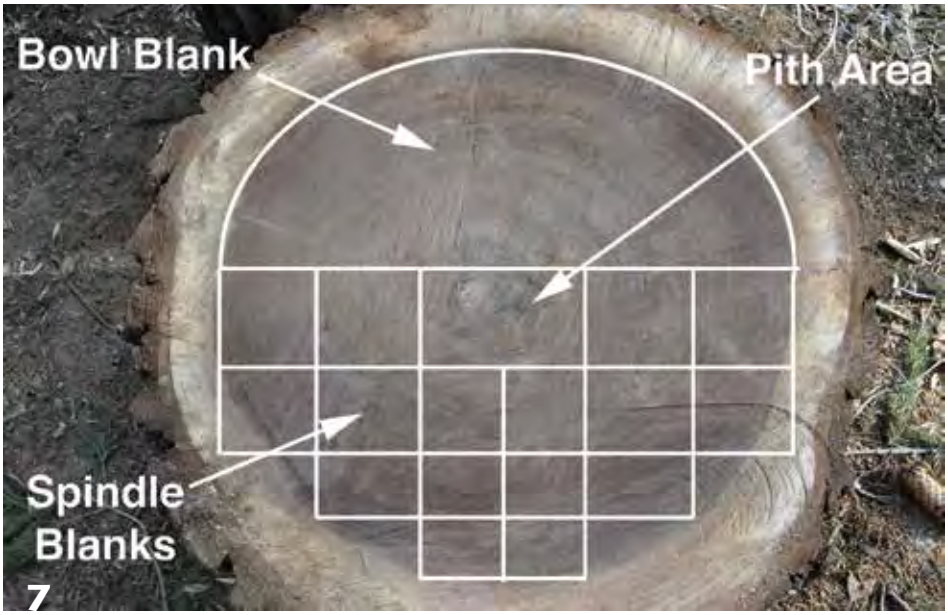
I used the crotch grain in this black walnut log as a feature in a turned platter.

The finished platter, 2011, walnut, 1½" × 15"

A freshly sawn log shows natural wonders with great potential for a bowl!



The dark streaks in this maple resulted from the unique mineral content of the soil.



Endgrain of a log illustrates a typical approach to harvesting bowl and spindle-turning stock. To maximize the size of a bowl in this orientation, the log should be cut at least as long as its diameter. The pith and its surrounding area should be cut away since it is unstable during drying and often results in cracks.

the rim is best made from green wood. Turn it green, let it warp, and bask in the glory of your family's compliments. They will truly wonder at your creative use of nature's bounty *(Photo 1)*.

The size and scope of hollow vessels would be severely limited if only kiln-dried wood were used. Woodturners can take a whole section of a green log, mount it directly to the lathe, shape the outside and remove the wood inside to create a hollow vessel *(Photo 2)*. With this process, the wood can usually move without cracking while drying. The small area of pith on the bottom can be treated with CA glue or drilled and plugged.

The process of turning green wood is easier on tools because the water in the wood lubricates the cut—shavings easily peel away, many in long ribbons. Cutting tools stay sharper longer and tools leave a smoother surface.

Working with green wood requires some investment of time, effort, and money up front. For example, you will need some means of cutting logs into usable pieces for turning, which means acquiring a chainsaw and a bandsaw. Portable bandsaw-type sawmills can be expensive. Also, woodturners require room to process and store wood properly. If you live in an apartment or your neighborhood association has strict codes, chainsawing lumber on your driveway is probably not conducive to being neighborly. Ideally, processed spindle blanks and roughed-out bowls should be stored in a warm dry place for air-drying. Do you have the room to do so?

If you have the knowledge, space, and equipment, harvesting green wood can have significant benefits. Top on the list is the cost of wood. Kiln-dried lumber is relatively expensive. By the time you buy it, the wood has been handled many times: the tree felled, log rough sawn in a mill, and boards dried in a kiln, perhaps even planed to a uniform thickness. During this process, the wood likely has been transported several times, and that cost is built into the final price. Conversely, you can acquire freshly cut logs free, either from a local tree surgeon or from trees that have come down around your neighborhood. Even in urban settings, there will be tree pruning and removal periodically, so friendly communication with public works or botanical gardens personnel could prove beneficial.

When you learn to process your own turning stock from logs, you can choose which parts of a tree to harvest, such as crotch grain or a section that appears to have figure in it. Often, I am happily surprised with the interesting characteristics I find within the logs

The half logs of black walnut reveal a richly colored treasure. A small amount of pith can be seen in the upper part of the logs, but that will be cut away later.

A bowl blank can be rough-shaped with a chainsaw. The chalk mark represents the top of the bowl blank.

To rough shape a log using a bandsaw, start safely by initially cutting the log in half with the grain running vertically. Each half can then yield a bowl blank with the grain running horizontally, as in *Photo 9*.

Rough turning the outside of a maple bowl from green wood reveals mineral streaks and ambrosia markings.

After air-drying this walnut bowl blank for several months, it can be finish-turned.

I harvest *(Photos 3, 4, 5, 6)*. A maple log from a neighbor's tree may have beautiful ambrosia markings, mineral streaks from the soil, or spalting—qualities that generally are too unusual or cost-prohibitive for hardwood dealers to handle.

Harvesting and air-drying bowl stock

When you harvest wood from a log, it is best to do so as quickly as possible after cutting the log to length, before endgrain checking has had a chance to occur. First, locate the pith *(Photo 7)*. This is the original strand within the stem or trunk around which the annual growth rings form. The pith is not necessarily located at the center of the tree—growth rings can form quite out of round. The wood closest to the pith tends to be unstable when the wood dries, and if not removed, that area can cause unnecessary cracking throughout the entire turning blank. Unless you intend to incorporate the pith into a project for dramatic effect, it should be cut away, either during blank preparation or at the lathe.

Cut the log in half, at or near the pith, essentially splitting the log lengthwise *(Photo 8)*. This can be accomplished with a typical chainsaw setup, but make sure you use a sharp chain. Special chains made for ripping along the grain can make this process easier. Another way to cut a log along the grain is with a portable bandsaw-type sawmill. (See AAW's recent book, *Safety for Woodturners* for hints on how to safely rip wood with a chainsaw woodturner.org/products.)

To harvest bowl-blank material, mark a circle on a half log using chalk, and then rough-shape the bowl blank with a chainsaw *(Photo 9)*. Alternatively, you can cut the log in half and form the bowl blank using a bandsaw if you have one with enough capacity *(Photo 10)*.

Drying wood much thicker than 4" (10cm) thick is not feasible, so it is best to turn bowls right away from green blanks. To rough-turn a bowl, shape and hollow it, but leave the walls extra thick for safe, slow drying and to ensure there is enough wood left to re-turn the bowl round after the wood warps *(Photos 11, 12)*. The rule of thumb for wall thickness of a rough-turned bowl is 1" (2.5cm) per 10" (25cm) of rim diameter, so a 15"- (38cm-) diameter bowl, for example, would have walls that are 1½" (4cm) thick.

It is important to make the wall thickness as uniform as possible from rim to bottom so drying can occur evenly, which further reduces the chances of cracking. Immediately after rough turning, coat the bowl with a wax emulsion sealer, which will slow the drying process and even out moisture loss from endgrain and side grain wood—moisture loss is greater from endgrain than from side grain.

Set aside the bowl for several months to a year to air-dry, preferably in an environment that is not too hot and dry. As the wood loses moisture, the bowl will change shape and go out of round—wood shrinks more across the grain than along the grain. After the bowl blank is dry, remount it onto the lathe for final turning, sanding, and finishing. This is what is commonly called a twice-turned bowl.

It is also possible to turn a bowl from green wood directly to its final thickness. This is a lot of fun, but you need to work quickly so the wood does not dry and distort as you turn. It helps to keep wetting the wood as you go. The walls can be turned quite thin, so the wood will dry faster than for a rough-turned bowl. The bowl will also warp and change shape, often leaving a wavy rim.

Spindle-turning stock

To harvest spindle-turning stock, make additional rip cuts in the freshly ▸

Spindle stock can be cut using a chainsaw, but an easier option would be to rip the blanks using a bandsaw after cutting the log to a manageable dimension.

cut half-log to create blanks of various dimensions *(see Photo 7)*. These rip cuts can be made with a chainsaw *(Photo 13)*, but are more easily accomplished on a bandsaw *(Photos 14, 15)*. Spindle blanks do not need to be cut exactly square—eventually they will be turned round when mounted between centers, so it is sufficient to make these rip cuts freehand. Seal the ends of spindle blanks with a wax emulsion to minimize endgrain checking, and set them aside for air-drying, stacking them so air circulates around each piece.

The rule of thumb for air-drying wood is one year for each inch of thickness, and this applies to both flat lumber (spindle stock) and roughed-out bowls. Drying times vary greatly, however, depending on the type of wood and the humidity level in which the wood is being dried. Ultimately, the goal is for the wood's moisture content to reach a point of equilibrium with the surrounding humidity. Then it will be relatively stable in that environment. If in doubt, a moisture meter can be used to verify moisture content.

Air-dried lumber is often of a much nicer quality, with a gentler cutting response, than kiln-dried stock. It has been dried slower and by a more natural process. For woodturners, kiln-dried lumber certainly has its uses, but if you have only turned kiln-dried wood, you may be missing out on some of the unique joys of harvesting and turning green wood. ■

Joshua Friend, a woodturner and writer, is a member of the Nutmeg Woodturners League, an AAW chapter that meets at the Brookfield Craft Center in Brookfield, Connecticut. See jfriendwoodworks.com for examples of his work and contact information.

Kiln for Drying Wood

Larry Zubke

The kiln is loaded with wood.

To speed up the drying process and improve the odds of successfully preserving wood blanks, I built a drying kiln. A kiln provides a stable environment by maintaining a consistent temperature and humidity. For research, I spoke to woodturners in my local club and also found articles on the Internet. I discovered that there are no hard-and-fast rules for building a kiln, so I took several ideas and combined them into something that would work for me.

A small chest freezer that had quit working began the project. The metal walls with insulation between them help retain heat, making this kiln economical to run, even in wintertime. For safety, I installed a hasp and padlock on the door.

I removed the compressor and mounted casters on one side to stand the freezer up so it can move around easily. The vertical positioning of the door allows easy access. An upright freezer or refrigerator might work better, but this unit takes up less space.

I installed open-wire shelves to support the green wood and to allow air to move freely within the kiln. A watertight light fixture with two 60-watt incandescent lightbulbs mounted on the base of the freezer provides the heat source. A thin sheet metal plate sits over the bulbs to protect them from dripping water. The metal also retains heat from the bulbs, slowly releasing it after the power is off.

A greenhouse thermostat with a remote sensor monitors and regulates the temperature inside the kiln by automatically turning the bulbs on or off so that a consistent temperature is maintained. I drilled four ½" (13mm) holes in the bottom of the freezer below the lightbulbs and four matching holes in the upper rear wall. Heat convection from the bulbs draws outside air into the freezer through the bottom holes. Warm humid air exits the freezer through the top holes.

After my first batch of wood was dry, I decided to install a 5" (13cm) fan, salvaged from computer equipment. This fan runs all the time and helps circulate the air, which speeds up the drying process. Without the fan, the first batch of wood took approximately seven weeks to dry. The second batch took only five weeks.

I generally start by setting the temperature at 80°F (27°C) for the first week. At week two, I increase the temperature to 85°F (29°C). The third week, I raise the temperature to 90°F (32°C) and leave it there until the wood is dry. During the first few weeks, the humidity is 70 to 80 percent, so the air exiting the kiln often condenses on the outside of the holes. As the drying process progresses, the humidity continues to drop. The time it takes for the blanks to finish drying depends upon: the time of year the tree was cut, wood species, diameter, rough-turned wall thickness, storage-environment temperature, and humidity.

To measure the wood's dryness, I weigh the largest and thickest blanks with a digital fishing scale and write the weight and date on each blank. At first, I check the blanks monthly, and then weekly as the weight loss begins to slow. When the blanks stop losing weight (moisture), they can be finish turned. ■

Mounted on the left-hand side of the kiln are the controls, power switch, and outlet, as well as the greenhouse controller. Note the padlock for safety.

A fan is mounted underneath the wire shelf.

The lightbulbs are mounted on the back of the kiln near the bottom, a sheet of metal covers the bulbs, and the holes are drilled through the bottom of the freezer.

The sensor for the greenhouse controller is mounted to the ceiling inside the kiln. The four holes drilled through the upper back wall of the freezer can be seen.

A 13" (33cm) cottonwood bowl, rough turned from green wood, weighed 5.09 lb (2.3kg) June 11 when it was placed in the kiln. It weighed 3.43 lb (1.6kg) July 15, and 3.42 lb (1.6kg) July 22. This bowl stopped losing weight, is dry, and ready to be finish turned.

Larry Zubke has been an avid woodworker all of his life, learning from his father and other family members. Since joining the Dakota Woodturners, his focus shifted to woodturning.

{ELEGANT BUSINESS CARD HOLDER}

Mike Peace

The card holder on the left is turned from padauk and Bradford pear. The one on the right is cherry and spalted maple.

You carefully choose the perfect business card design. Now, how best to display them? This easy turning project results in an elegant, practical item. It makes a nice gift, too. You basically turn a disk, embellish one side, and then cut the disk in half. The two half-disks sandwich a cylinder that is cut to serve as a tray for business cards.

Making a card holder provides a chance to use small pieces of exotic hardwoods. Pair woods for the tray that complement the disk or create a statement. Spalted wood goes well with ebony. The contrast of maple and walnut may provide just the touch needed for a particular color of card. The only requirement is that the wood be dry.

Turn a disk and cut in half

Select a piece of wood about 3¼" (83mm) square and at least 1¼" (31mm) long. Use a longer piece if you are making more than one card holder. Mount the wood between centers and use a spindle-roughing gouge to turn it to a cylinder, 3" to 3⅛" (76mm to 79mm) in diameter. Cut a tenon on one end, reverse the cylinder, and mount the tenon into a four-jaw chuck *(Photo 1)*.

Embellish the face of the cylinder by adding decorative beads with a spindle gouge. Then, carefully sand the disk, taking care not to sand away crisp edges and details. I generally sand to 400 grit.

You may want to use a texturing tool or a chatter tool to add additional embellishment. These tools work best on tight-grained endgrain, but I have had good luck with texturing the side grain of exotic woods, which tend to have harder, tighter grain *(Photo 2)*.

Mark a line on the side of the cylinder ½" to ⅝" (13mm to 16mm) from the end to establish the thickness of the disk. Begin a parting cut to the left of that line, using a sharp ¼" (6mm) parting tool to minimize tearout. Make the cut no more than ¾" (19mm) deep, and then finish turn the beaded edge *(Photo 3)*.

Sand the edge, and then move the toolrest parallel with the face of the disk and adjust its height to align right at center. Rotate the disk so that the mark will be along the grain line. Using the toolrest as a ruler, draw a pencil line across the disk *(Photo 4)*. This line will be used as a guide to cut the disk in half using a bandsaw or scroll saw.

Turning an endgrain cylinder lets you make several card holders at once.

Embellish the disks with beads, texturing, or chatter marks.

Make a parting cut to define the thickness of the disk and allow clearance to finish turn the bead on the rim. Here, a disk is turned from a flat board *(see sidebar)*.

Use the toolrest to draw a guideline across the exact centerline of the disk. After parting off, cut the disk in half along the guideline.

Carefully part off the disk—the parted-off side will probably require a little hand sanding, but make sure the back surface is flat to ensure a successful glue joint. Cut the disk in half.

The tray for cards

A basic tray for cards can be made from two pieces of flat stock glued into an L shape, but a turned tray is more visually interesting.

Mount a blank between centers and turn it to a cylinder about 3⁹⁄₁₆" long and 1½" in diameter (89mm by 38mm). This length is based on the length of a business card, plus a little extra space for clearance. For appearance's sake, the diameter of the cylinder for the tray should be somewhat less than half the diameter of the disk. In general, card holders with the cylinder tray rising above the sides are not attractive. If, however, you have turned the cylinder too large, no problem—simply flatten the bottom on a belt sander to lower its profile *(Photo 5)*.

With the cylinder off the lathe, trim its ends flat and square—they are the surfaces that will be glued to the disk, so be as accurate as possible. You can do this using a bandsaw, but for safety, hold the cylinder in a clamp.

Reposition the cylinder in the screw clamp, and then make multiple cuts with the bandsaw to create a slot about ⁵⁄₁₆" (8mm) wide. Clean up the bottom of the slot with a narrow chisel. The large screw clamp keeps the cylinder secure and your fingers safely away from the blade *(Photo 6)*. Or, instead of a slot, cut a notch: Make two bandsaw cuts that meet past the center so the angle is somewhat less than 90° *(Photo 7)*.

Glue the tray between the two half disks with the notch (or slot) tilted back at about a 35° angle. Glue up on a sheet of wax paper on a tablesaw so that you can square things up against the fence. I use a scrap of wood as a spacer to align the cylinder with the half-disks *(Photo 8)*. Clamp and then let the glue dry.

I have had success using regular yellow glue, but endgrain is not an ideal joint surface, so you may want to use thick CA glue or epoxy to ensure the glue joints will hold. Remove any excess glue and check the surfaces for final hand sanding. I use Minwax Antique Oil for most of my turning projects—the oil is simple to apply and wipe off. After applying and wiping off two coats, 24 hours apart, I let the piece dry for two or three days, and then buff it. ■

Mike Peace is a retired software projects manager and a retired Lieutenant Colonel in the U.S. Army Reserve. He has been turning for six years and enjoys making a wide variety of projects. A member of the AAW, Mike is active in three woodturning chapters in the Atlanta area. He enjoys teaching turning and demonstrating. You can see Mike's work and previously published articles on his website, MikePeacewoodturning.blogspot.com.

If necessary, sand the bottom of the center cylinder flat so it fits within the half-disks on the ends.

Hold the cylinder in a screw clamp and create a slot by making multiple bandsaw cuts.

Alternatively, cut out a V-shaped notch for holding the cards.

For glue-up, I register the disks against a tablesaw fence and use scrap wood as a spacer to help align the cylinder.

Disks from flat stock—use a glue block

I find it easiest to turn disks from a cylinder, but you can also turn them individually from a ¾"- (20mm-) thick board, which may allow more wood choices and better use of grain patterns. For this, it is best to use a glue block to hold the wood, which will keep it free of chuck marks and screw holes and also allow you to use the full thickness of the wood.

Use the tailstock as a clamp when gluing the workpiece to a glue block. The glue block is held in a four-jaw chuck.

True the side of the disk and flatten the face to remove any marks left by the tailstock.

Make a glue block from a ¾"-thick hardwood scrap; poplar is a good choice. The gluing surface should be side grain, not endgrain. Cut out a circle slightly smaller than the one you will turn for the card holder.

Place the glue block against the chuck jaws and use the tailstock to hold it in place. True up the circle and cut a tenon on the face. Reverse the block, and use the tenon to hold it in the chuck's jaws. True the face so it is flat to ensure a secure glue joint for the disk.

Spread glue over the entire face. Center the workpiece over the glue block and bring up the tailstock to apply pressure until the glue dries. You can use medium or thick CA glue, but I prefer using wood glue, letting it dry overnight.

Turn the disk and part it off as described in the article.

Spaghetti Forks:

A QUIRKY TWIST FOR AN ORDINARY IMPLEMENT

John Lucas

Woodturning is all about having fun, so occasionally I have to make something purely for pleasure. Call these forks art or craft; to me they are simply amusing. *Spaghetti Forks With a Twist* came about from seeing one at a yard sale years ago. The concept stuck with me, and recently when making a small handle, I remembered the fork. What an enjoyable project!

Materials

First you need a fork. I picked up several at Goodwill, ones with non-metallic handles. Knock off the handle to access the tang. Depending on the shape of the tang, you may have to grind it down to a smaller size.

I acquired brass welding rod and ⅛"- (3.2mm-) diameter stainless-steel rod from Fastenal (fastenal.com). For now, leave the stainless-steel rod fairly long—it will be easier to bend later.

In order to fasten the rod to the fork, I silver soldered it using a MAPP gas torch; however, you may not have that capability, so a rivet will work. I explain how.

Rivet

Grind a V notch in the center of the fork tang. I used a small green grinding wheel in my Dremel. You might not need to cut a notch, but it allows the rod to sit lower and helps keep it aligned for riveting. (I doubt epoxy alone would hold the rod to the handle well enough.)

Temporarily glue the rod to the fork using medium-thick CA to hold it in place for drilling the holes for the rivets *(Photo 1)*. File a flat area on


Attach a stainless-steel rod to the tang of a fork or pancake flipper using rivets.


Two or three rivets securely hold the rod to the tang.

the top of the rod to make it easier to drill. Center punch the rod in two or three places. Select rivets—they could be made from thick copper or brass wire. I used small finishing nails. The nails did not exactly match any drill bit, so I used a slightly larger bit.

Drill carefully. I broke one drill bit. Clear the bit often and don't apply much pressure. A little drop of oil helps.

Insert the nails through the holes and hammer the heads using the ball end of a ball peen hammer until the metal is squashed and rounded over. Turn the rod over and cut off the nails so short lengths protrude. Peen those over, like on top. These rivets securely fasten the tang and rod together *(Photo 2)*.

Handle for the fork

Cut a piece of wood about 4" (10cm) long and ¾" (20mm) square. Pen blanks work well. Mount the blank between centers and turn it to a cylinder. It doesn't have to be totally round at this point. It only needs to fit into a shopmade chuck.

Now, make a wooden chuck to hold the blank onto the lathe for drilling a hole through it. Mount a piece of wood, about 1½" (38mm) square into a four-jaw chuck and drill a ¾"- (20mm-) diameter hole about 1½" deep. While the block is still square, remove it from the chuck and cut two slots about 2" (50mm) into the endgrain using the bandsaw. Put the block back into the chuck and turn it round so its end will take a band clamp. This wooden chuck will help ensure that the hole you drill through the handle will be accurate. ▸


After making a chuck, drill the hole for the tang and then drill all the way through the handle, drilling from both ends.


Remount the handle between centers, onto a mandrel and secured by a cone center in the tailstock.


With the wood securely mounted, turn the handle to a pleasing shape.

Use the chuck to mount the knob onto the lathe.

Bend the wire twice.

Insert the handle blank into the wooden chuck and tighten the band clamp. Drill a shallow hole in the end for the tang portion of the fork *(Photo 3)*. The hole may need to be larger in diameter than you think—about 5⁄16"—but fork tangs vary, so be prepared to drill the hole larger or deeper after checking the fit.

Replace the drill bit with a 3⁄16" (5mm) bit and drill as deep as you can. Turn the handle blank around and drill from the other end. If everything goes well, the two holes will meet in the middle. Remove the blank and insert the fork and rod to see if it all works properly. If not, drill the holes larger.

Turn a mandrel to fit into your four-jaw chuck. It will have a tenon on the end that fits the large hole in the handle blank. I simply drilled a cylindrical waste block to hold a 3⁄8" (10mm) dowel, and glued the dowel in. Then, I turned the dowel down to fit the large hole in the handle *(Photo 4)*. Mount the handle onto the mandrel and use a cone center on the tailstock end *(Photo 5)*.

Turn the handle to your own creative design. Use the point of a skew to turn the ends down to the mandrel and live center cone. Sand and apply finish.

Crank knob

Turn another 3⁄4" (20mm) blank to make the crank-knob handle. Insert this into the 3⁄4" chuck. Center drill a 1⁄8" (3mm) hole, about 5⁄8" (16mm) deep. Turn the little knob to a pleasing shape *(Photo 6)*. Make it about 3⁄4" long, sand, and apply finish.

Insert the fork and rod through the handle and you are ready to bend the rod. Put a soft-jaw clamp around the wood to keep it from cracking. Bend the rod 90° *(Photo 7)*. Grab this bend with vise grips and bend the remaining wire another 90°.

Cut off the wire to a length that fits properly into the hole in the small knob. Apply epoxy and attach the knob to the wire. If the fit is snug, the pressure of the epoxy and air trapped in the hole may push the wire back out, so twist the wire in and either hold the assembly for quick-set epoxy, or clamp it for slower-set epoxy.

Now it's time to enjoy your pasta... and, if you order today we'll throw in the pancake flipper as well! Just $19.95 plus shipping. ■

John Lucas is a retired professional photographer, now a full-time woodturner who teaches and demonstrates. Many of his instructional videos can be seen on YouTube.

You're NEVER Too OLD

John E. Peterson

John Peterson at his lathe.

In 1998, at 72 years old, I was at a crossroads. Four years earlier I had been diagnosed with cancer, I was single, and my children grown. It was time to follow long-ignored dreams of woodworking and writing.

I bought a Shopsmith, hoping for inspiration. Confusing zeal with ability, my shortcomings fed the fire. An attempt at woodturning became a near disaster when a misshapen, out-of-balance piece of oak induced my Shopsmith to dance wildly.

Later, a friend gave me a woodturned pen. Now, this was something I could safely make on my lathe. I ordered pen kits, blanks, and instructions, made a few pens, but never developed a real interest—pen kits available then lacked appeal.

At retirement, I registered for an Elderhostel course in short fiction at the University of Iowa. I met someone there from Boston whom I wanted to see again, so I enrolled in a woodturning class in Williamsburg, Massachusetts. My first real instruction in woodturning produced a lidded walnut box. Although crude, it was *my* creation!

I bought books and DVDs on turning. Shopsmith introduced a chuck for its lathe, which increased the range of things I could make. Still fearful of the lathe, I did more reading than producing, but I kept dreaming.

A catalog from Craft Supplies USA came to my attention and I enrolled in one of their three-day classes, taught by Kip Christensen. Excellent class! Numerous projects later, I had a better appreciation for the lathe.

I made many projects with my newly acquired knowledge, and within a year, I bought a Vicmarc mini lathe. At last, a machine made solely for turning! Next, came a Oneway 1640 lathe—variable speeds and reverse were essential.

Woodturning and writing classes

When I turned eighty, I realized the time for self-instruction was over. I enrolled in an Alan Lacer woodturning class at Marc Adams School of Woodworking. I learned so much that the next year found me in another class, taught by Betty Scarpino. Subsequent classes followed: 2010 with Ray Key, 2011 with Richard Raffan, Michael Mocho in 2012, and Jimmy Clewes this year. I'll never be a woodturner equal to the likes of my instructors, but no one has more fun at the lathe!

While increasing my woodturning skills, I was also developing competence in creative writing. After that first writing class in Iowa, I took others. Despite dissimilarities, writing and woodturning fit my needs. When my unheated workshop discourages turning, I turn to my word processor. I am far from being a first-class writer, but continue to practice.

My rationale for taking classes is simple: When reaching my twilight years, I may not have all the time I want to develop skills on my own. I cannot help but regret I waited so long, but I realize now that it's never is too late to start pursuing a dream. ■

Bowl, Cottonwood, 2013, 3" × 9½" (8cm × 24cm)

Box, 2011, Poplar, black wax, 3½" × 5½" (9cm × 14cm)

John Peterson is a happily retired Air Force meteorologist and commodities broker.

Patchwork *Brooch*

Andrew Potocnik

My partner is a keen quilter. She cuts large lengths of perfectly good fabric into small pieces, and then stitches them together to form sizable blocks of geometric forms. Some of her techniques defy understanding where she began. A recent quilting project made me realize that some quilting patterns can be converted into wooden versions. I began exploring options for woodturning.

A three-colored lamination in one of her quilts intrigued me, so I used that as the basis of my design. I began by selecting timbers that had contrasting colors and grain structure. Searching through my thirty-year collection of wood, I selected three species: highly figured maple, wenge (for its lovely contrast between black and brown), and sheoak (for its orange hue and alternative medullary grain structure).

Prepare the lamination

I wanted to end up with enough laminated squares to make several brooches, so I cut two thin strips, about ¼" (6mm) thick, of each wood. (The number and thickness of strips will depend on the length and thickness of your timber and the size of your project.) To reduce stray cuts and prevent material wastage, I clamped a guide block to my bandsaw *(Photo 1)*. I planed to the correct thickness and clamped the three strips together *(Photo 2)*. To make the edges even, I used a jointer *(Photo 3)*.

I resawed the laminated strips, planed the edges, and then cut the strips into squares.

To cut the strips square, I set up a jig on my drop saw that allowed adjustments for squareness and length. An elongated slot secured with a screw, with which I could adjust a stop block, allowed me to get just the right distance between it and the blade. There are other methods for achieving identical square pieces if you do not have a drop saw.

After cutting a few squares, I realized that masking tape would reduce waste. A strip of tape easily held each cut square in place as the saw blade stopped spinning. I would retrieve one square at a time, move the stock along, and secure the next piece to be cut off.

Design and glue

With enough squares cut, it was time to consider possible configurations and patterns *(Photo 4)*. I soon realized there is an opportunity to make the most of every piece of timber, exploiting color, grain, and contrast. My design ended up containing sixteen squares. (Already designed, pre-laminated wood can be purchased instead of cutting and gluing strips of wood.)

After finding a pattern that satisfied me, I was ready to glue the block of squares. I arranged a simple jig made of MDF, which allowed the squares to be pushed together and clamped *(Photo 5). Before applying glue, be sure to wax all surfaces that may contact glue squeeze-out.*

The turner in me realized I could turn a round disk and fit it into a turned border. I mounted the quilt block to a carrier using double-sided tape and turned it into a neat circular form with parallel front and back. Vernier calipers helped ensure they were parallel *(Photo 6)*. An artist's pallet knife worked well to pry the disk from the carrier *(Photo 7)*.

The border

For the border, I used a stunning piece of back-sawn birdseye maple. After bandsawing a circle, about 2¼" (55mm) in diameter, I attached the wood to a waste block using heat-sensitive glue.

To determine the area my quilt-patterned disk would fit into, I used Vernier calipers to transfer measurements *(Photo 8)*, and then hollowed a recess *(Photo 9)*. To trim the recess ▸

A guide block clamped to the bandsaw helps ensure straight cuts.

After surfacing the strips, three are glued together.

The edges of the strips can be cleaned up on a jointer, or planed by hand.

This is the fun part, figuring out a design pattern.

A simple jig allows the squares to be pushed together, and then clamped.

Vernier calipers help ensure the front and back of the disk are parallel.

An artist's pallet knife works well to pry the disk from the carrier.

Using Vernier calipers makes transferring dimensions accurate.

Hollow a recess for the disk.

Use a small scraper to trim the recess to its final dimension.

Check the fit. The recess should be just deep enough so the disk is about 1mm above the surface of the border.

Glue the disk into its border.

to its final dimension, I used a small scraper *(Photo 10)*.

I checked the fit *(Photo 11)* and then cut the recess just deep enough so the disk was about 1/16" (1mm) above the surface of the border.

PVA (carpenter's) glue worked well to glue the disk into the border. A small piece of MDF between the block and tailstock center protected the surface and provided even pressure while the glue cured *(Photo 12)*.

Add defining lines

With the glue cured, it was time to trim the outer perimeter of the brooch and scrape its face to a smooth slightly convex shape *(Photo 13)*. To define the elements and enhance its overall appearance, I cut two V grooves *(Photo 14)*.

After sanding to a final surface with 320-grit abrasive, I was ready to separate the brooch from its carrier. I used a thin-bladed parting tool *(Photo 15)* before sawing it free with a coping saw *(Photo 16)*.

Finish the back

Finishing the back required a jam-fit chuck mounted onto a face-plate. I used cedar, into which I cut a recess. I took the precaution of carving out a channel that would allow me to pry the brooch free later without causing damage to the finished surface *(Photo 17)*.

With the brooch mounted securely, I turned the back slightly domed-shaped *(Photo 18)*, sanded, applied a finish, and attached a clasp *(Photo 19)*.

The brooch is ready to wear to a quilter's event! ■


13

Trim the perimeter and scrape smooth the face of the brooch.


14

Add V grooves to define elements.


15

Use a thin-blade parting tool to begin parting the disk from its carrier.


16

Saw the disk free using a coping saw.

Andrew Potocnik has been involved in woodturning since high school. His work is represented in many private and museum collections. He was an ITE (International Turning Exchange) Resident in 2004, and he writes for other woodworking publications. Andrew's primary interest is sharing his passion for wood with students in a school setting.


17

To remount the disk, turn a recess and then cut a groove in the side, which will allow you to easily free the disk later.

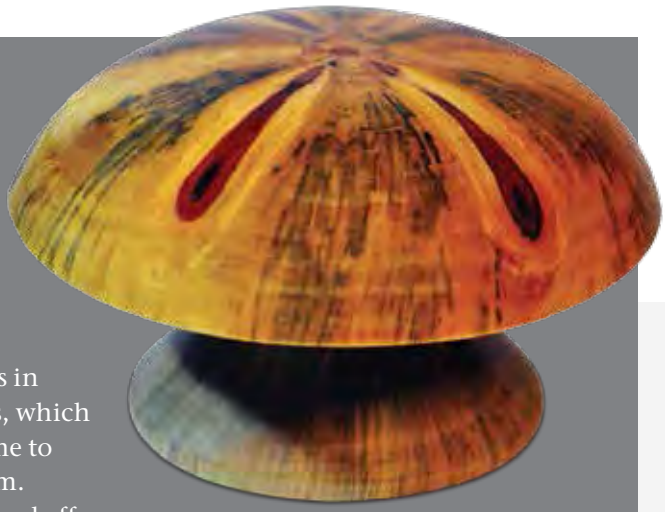

18

Turn the back of the disk.


19

After sanding and applying finish, attach a clasp.

A MUSHROOM FOR MELISSA



Franck Johannesen

A few years ago, one of the most pleasant members of my local woodturning community asked me to make her a toadstool. I was both flattered and anxious—I had never made a mushroom, but it sounded like a fun and rewarding project. I used Norfolk Island pine, a wood readily available in Florida. *Mushroom Hunters Guide* showed mushrooms in loads of shapes and colors, which provided full license for me to create a fantasy mushroom.

The project is enjoyable and offers endless possibilities for dyeing, shaping, and other surface embellishments. Carvers, piercers, and asymmetric turners should enjoy making one as the project lends itself to these skills. ■

Franck's past endeavors have been as an engineer, optician, and tree farmer. He is currently a full-time woodturner and has demonstrated at AAW's symposium, taught at John C. Campbell School, and founded the Sarasota Woodturners.

I mounted a turning blank between centers, using a Oneway Big Bite drive and a live center in the tailstock. With the lathe set at a slow speed, I trued the cylinder using a spindle-roughing gouge.

Next came the opportunity to check the alignment of the knots and adjust the center to provide a pleasing star pattern. Experience tells us that the pattern could be just as interesting off center as perfectly centered—consideration of design features will affect results.

With the cylinder now properly aligned, I squared the tailstock end and began to fashion the top of the mushroom, leaving enough material for a tenon or small faceplate.

I remounted the cylinder into a four-jaw chuck so that the base of the mushroom was toward the tailstock, and began shaping the stem.

A flared stem provides a broader footprint, but I needed to reduce its thickness to avoid checking as the piece dried. First, I drilled out the stem, using a drill bit, and then finished thinning the walls with a gouge.

To finish the mushroom, I reversed the piece again and used a cone chuck with pressure from the tailstock. After reducing the tenon to a small nubbin, I carefully parted it off and sanded the top. The toadstool was ready for finish.

At this stage, the knots in Norfolk Island pine should be coated with thin CA glue to prevent them from cracking during the drying process. A mouth sponge (medical supply) is a convenient applicator, which limits the spread of the CA glue. As a rule, Danish oil will provide the light luster this piece requires.

Inside Out Candleholder

Richard May

Using the technique of inside-out turning occurred to me when I was designing an interesting central column for a pastry stand. I envisioned something lighter and more intricate than an ordinary spindle. The inside-out technique works well for small objects like ornaments, and I saw the possibility for larger and more dramatic pieces. After reading Barbara Dill's article on multiaxis turning (*AW*, vol 26, no 6), I was ready to try turning curves and align the inside and outside shapes.

I began by making numerous exploratory turnings, using inexpensive pine, to get a sense of the process. I could easily visualize the outside of these turnings. Achieving a pleasing shape for the vertical elements (or blades) is dependent on the inside shapes—that took a while to figure out. I suggest a few trials of your own to understand the inside/outside relationship.

Turn the outside

To make the candleholder, begin by carefully milling four identical spindle blanks 12" long × 1½" square (305mm × 38mm). These staves make the turning blank roughly the length of the candleholder plus 1" (25 mm) on either end. Hold the staves together by wrapping them tightly with three layers of strapping tape, then square off the ends. Mark the assembly so you can keep the staves oriented properly *(Photo 1)*. I use an awl to make a small hole at the center of the end that will be held by the tailstock's live center.

Mount the assembly using a four-jaw chuck and a live center. Orient the blank so the chuck holds the base of the piece and the live center supports the top.

Rough-turn the blank to a cylinder, leaving about 1" (25mm) square at each end *(Photo 2)*. Turn the profile of the outside of the candleholder in this

1 Tape together four identical staves. Mark the outside corners and the center.

2 Rough-turn the space between the taped ends to a cylinder.

3 Turn the candleholder profile.

Flip the staves around and retape the bundle so you can turn the inside shape. (The gap between staves is just a small chip in one stave.)

Mark the area to be turned away, to help you avoid removing too much wood.

As the shape develops, be sure the inside and outside curves complement one another.

Turn until the edges are sharp. Work carefully where the blades curve into the base.

Sand the finished inside curves smooth.

Off the lathe, apply finish to the inside faces of the blades. Be sure to mask off gluing surfaces.

central area. Turn it smooth, but leave it unsanded *(Photo 3)*.

Turn the inside

Remove the assembly from the lathe, unwind the tape, and rotate each stave 180°, so the corners that originally met in the center are now at the outside of the bundle. Retape the bundle, keeping the ends and sides flush *(Photo 4)*.

Remount the realigned bundle to turn the inside shapes, and mark the general area for wood removal *(Photo 5)*. I use a sharp ⅜" (9mm) spindle or detail gouge and a skew chisel for this part of the project.

Remove wood until the edges of the blades are sharp *(Photos 6, 7)*. Work carefully at this stage: *If you cut too deep, the blades will separate from the unturned base.* Quite a bit of wood needs to be removed to create blades with an open, delicate appearance. If you have difficulty visualizing the look of the finished candleholder, remove the assembly and untape the bundle. Rotate the staves to their original positions to evaluate the shape. As long as you keep the ends square, you can flip and retape as often as needed. I did this several times before I achieved a satisfactory result.

Take the time to make the inside curves smooth—you will use them as the reference surface when you finish shaping the outside *(Photo 8)*. Depending on where or how much wood you remove, areas of the blades may become ribbonlike, while others remain bulbous. If the thinner areas of the blades become too flexible or begin to vibrate, wrap them with tape for support.

When you are satisfied, finish-sand the inside surface of the blades. I sand to 240 grit.

Take the assembly off the lathe and remove the tape. Apply masking tape to the surfaces that will be glued, and ▸


Inside-out turnings need not be small. The column for this table is 21" (53cm) tall.

Begin glue-up with just two staves.

And, then glue the pairs together. A two-stage glue-up makes it easier to keep the pieces aligned.

Taping the blades helps dampen vibration when shaping the top of the candleholder.

apply finish to the inside surface of the blades *(Photo 9)*. I used several coats of gloss wipe-on polyurethane, rubbing with 0000 steel wool between coats.

Permanently glue the staves together in two stages *(Photos 10, 11)*. I found that gluing all four staves at once resulted in poor alignment. I use two-part epoxy like West System or System Three with thickener because of its strength and gap-filling properties. Yellow or wood glue does not tolerate joint irregularities. Carefully remove any squeeze-out on the inside with a dry cotton swab.

Finish the turning

When the epoxy has cured, remount the assembly and complete the final shaping of the outside. The need for smooth interior curves becomes obvious now because irregularities show as jagged edges on the blades. To avoid chipping the edges of the blades, do the final shaping and smoothing with abrasives.

Finally, turn the top and base. The base is easy to turn because it is held solidly at the chuck end. But work slowly and carefully at the top; the thin blades supporting the top will want to twist from the pressure of the turning tool. It may help to wrap strapping tape around the blades to stiffen the assembly, counteracting torque *(Photo 12)*. Sand and finish the outside.

I made a column for a pastry-stand using the same method; except the ends are round tenons and I left more wood at the ends of the blades for strength *(Photo 13)*.

This technique opens up many new possibilities for objects and designs—the numerous choices possible at each stage give an unlimited variety of outcomes. I am looking forward to trying more of them! ■

Richard May, a retired physician, has been a woodworker for forty years. His projects have ranged from harpsichords to sailboats. He purchased his first lathe thirty-five years ago for furniture work and basic faceplate turning. Joining a local turning club with remarkably skilled members, he was inspired to produce better work, which of course required a new lathe. He can be reached at rhmaymd@yahoo.com, and you can view his work at handmaydcrafts.wordpress.com

For this pastry stand, I turned tenons on the ends of the staves; the ones shown here at left need to be trimmed to length.

LINE: An Element of Art and Design

Tania Radda

While in college I was exposed to the *principles of art and design*, which is the foundation artists follow when organizing all of the elements in their art. I was told that in order to be a successful artist, I needed to know and understand these principles. After years of practicing this philosophy as an artist, I have a deeper understanding of how each of these elements works and how to apply them to my work. The principles are: *unity, harmony, variety, balance, contrast, proportion,* and *rhythm*.

These principles can be broken down into smaller parts called elements of *art,* which are the properties of a work of art. Each of the seven elements—*line, shape, texture, form, space, color,* and *value*—can be isolated, defined, and used as a foundation for understanding woodturning design. Recognizing each of these elements in a turned piece can help you assess your work to determine its success.

I invite you to explore each of these elements with me, with the end result being the ability to create excitement in your work. First, I will address the element, *line.* In subsequent articles, I will explore the other elements. ▸

Line is an identifiable path created by a point moving in space. It is one-dimensional; it varies in length, width, and direction. Our eyes easily recognize the line at the edges of a turned form. Depending on our skills, we may be able to change the line to reflect the shape we intended as we create a vessel or bowl. Line can be circular, oval, skewed, and straight, and it can be opened or closed.

We can utilize line on the surface of a turned piece to create added interest in the form of decorative patterns. No matter how we use line—horizontal, vertical, diagonal, straight, curved, thick, or thin—the purpose is to capture and lead the eye into and around the piece. By the manner in which we add line to our work, we determine how the viewer's eyes will follow the surface pattern. And, line can evoke emotions.

Types of line

Understanding how the various types of line can be used and what they represent will help you successfully influence the outcome of your work.

Horizontal lines usually evoke a feeling of rest or repose because objects that are parallel with the earth are considered to be at rest; this is apparent in Curt Theobald's *The Legend of the White Buffalo*. The vessel, although round, is visually grounded by the introduction of the centerline that cuts horizontally through it. His choice of design—buffalo—also helps instill a sense of rest: The buffalo are standing still.

The horizontal line does not always have to indicate rest; it can also be used as an open line that invites the eye in and then out of the composition. This can clearly be seen in Ron Layport's, *Masque of Eos, Goddess of the Dawn*, which invites viewing with a motion of the eyes starting from the left all the way through and exiting to the right.

Vertical lines often communicate a sense of height because they are perpendicular to the earth, extending upward toward the sky. In Bill Smith's, *Euclid's Dream*, our eyes cannot help but move up and down

Curt Theobald, *Legend of the White Buffalo,* 2007, Cherry, walnut, holly, veneer, 4½" × 6" (11cm × 15cm)

Howard Barnes Collection

Bill Smith, *Euclid's Dream,* 2008, Ebony, pear, 3⅞" × 3½" (10cm × 9cm)

Collection of the Artist

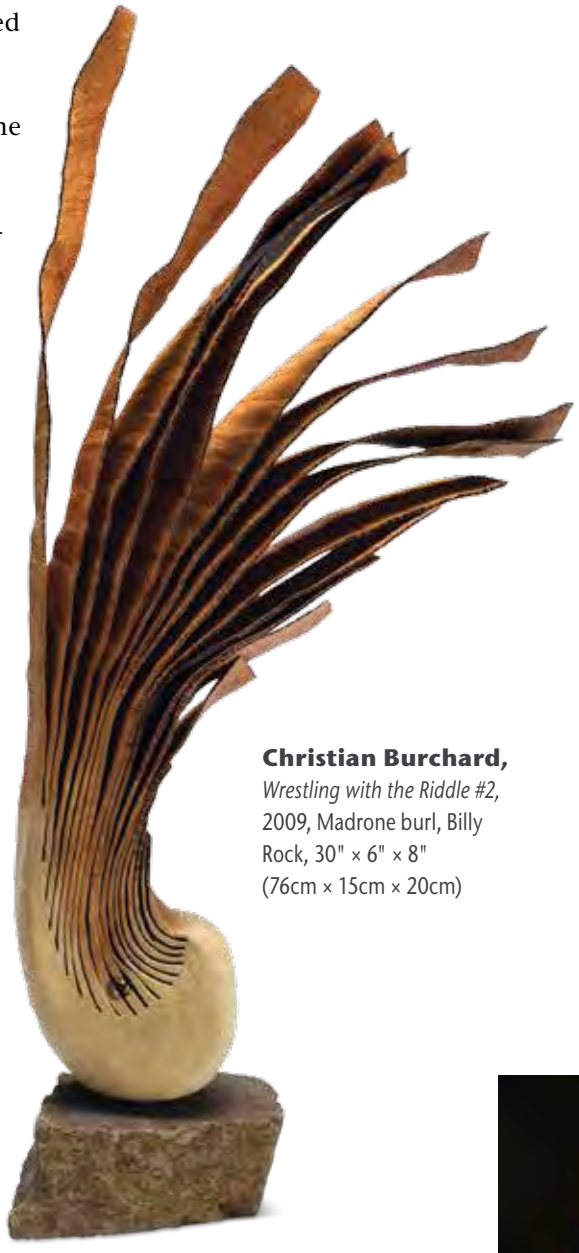
Ron Layport, *Masque of Eos,* Goddess of the Dawn, 2008, Sycamore, maple, steel, pigment, 11" × 21" × 6½" (28cm × 53cm × 17cm)

Photo: Mark May

Marshall and Wallis Katz Collection

the vessel. Although Smith used horizontal lines, they are pushed to the background by the overwhelming power of the vertical lines, which are enhanced by the contrast in color.

An open vertical line suggests an extension upward, as if reaching for the stars. This can be seen in Christian Burchard's, *Wrestling With the Riddle #2*. First, our eyes settle at the bottom of the piece, grounded by the mass, then as we look upward, we experience a rush as the form releases our view, directing us to seek imaginary lines in space. There is tension in Burchard's sculpture, and we feel it.



Christian Burchard, *Wrestling with the Riddle #2,* 2009, Madrone burl, Billy Rock, 30" × 6" × 8" (76cm × 15cm × 20cm)

Todd Hoyer, Untitled, 2008, Mesquite, wire, 17" × 8" (43cm × 20cm)

Private Collection

Horizontal and vertical lines, used in combination, communicate stability and solidity: Rectilinear forms with 90-degree angles are structurally stable. This stability suggests permanence and reliability. J. Paul Fennell has successfully taken us there with *Emei Lattice*. The lines in Fennell's piece are open and airy; our eyes are free to move in and out of the piece. He also introduces a diagonal line that helps frame the composition and contains our attention and focus to the areas he delineates.

Todd Hoyer uses this same combination of lines in *Untitled*, and the feeling this solid mass elicits could not be more different. Here the lines are closed—our eyes do not move freely and are grounded by the heaviness of the piece. It is a successful choice of lines for it holds the focus in the center of the piece while the different textures allow us room to breathe. It creates a contrasting balance that is not overpowering.

Diagonal lines convey a feeling of movement—objects in a diagonal position are unstable or moving, neither vertical nor horizontal, and about to fall or are already in motion. Diagonal lines help create motion. Alain Mailland's *Natural Mystic* abducts the viewer's eyes, directing them to visually enter from the left, curve along the lines from top to bottom, come to rest at the right top corner, only to slither down again toward the ▸

J. Paul Fennell, *Emei Lattice,* 2012, African sumac, acrylic paint, 10" × 12" (25cm × 30cm)

Betty Scarpino, *Undercurrent,* 2005, Maple, bleach, 14" × 16" × 4" (35cm × 41cm × 10cm)
Photo: Shawn Spence

American Association of Woodturners
Permanent Collection

Alain Mailland, *Natural Mystic,* 2007, Hackberry, African blackwood, shell powder, pigments, 55" × 60" × 45" (140cm × 152cm × 114cm)

opening of the vessel. What a delight of movement!

A curved line is soft; shallow curves recall the curves of the human body and often have a pleasing, sensual quality and a softening effect on the composition. This line can also convey energy and the idea of extending itself out of reach. I use curved lines extensively in my work, paying particular attention to where I want a sculpture to convey energy and sensuality. As a woman, I want my work to emanate a feminine quality, and I can do this by making lines soft and pleasing while maintaining the energy, as in *Wonderland Tea*. Since many of my pieces contain vines carved from wood, I believe it is important to evoke a sense of vines in motion, reaching out just as they would in nature.

Betty Scarpino also uses and understands curved lines: Softness and sensuality are stirred up in *Undercurrent*. In this piece our eyes are welcome to enter and exit the piece without feeling tension, we want to caress the curves, and if we were to hold this piece, we would probably bring it close to our chests and hold it there in an embrace. ■

Tania Radda was born in France and raised in São Paulo, Brazil. She was surrounded by the arts throughout her upbringing. In 1996, Tania enrolled in a BFA program at Arizona State University, and then went on to obtain an MFA in wood sculpture. Tania is a master of bending wood to extremes to magically create unique whimsical pieces.

Tania Radda, *Wonderland Tea,* 2012, Basswood, ash, acrylic paint, pencil, 4" × 9" × 7" (10cm × 23cm × 18cm)

What's my LINE?

Jerry Bennett

I am a woodturner and an artist. As such, I am always looking for a better gouge and a new line. Not just any gouge and not just any line. Think about it, lines are everywhere, and we are inherently connected to them. Lines keep us organized and civilized. Have you ever been out of line? Or, told to get *in* line? We are so in tune to lines that the slightest deviation from what we expect is noticed immediately. A lively discussion of nuance in the shape of a southwestern vessel will attest to that. Even my new gouge has a line at the edge that determines its effectiveness. When someone recognizes a work as art, they are reacting to its line.

I am continually looking for a line whose shape suggests unexpected movement and stirs curiosity.

Bill Luce, *Skeleton Tube,* 2009, Douglas fir, 16½" × 4½" (42cm × 11cm)

Permanent collection of the AAW

My quest is not actually for any particular line, but for specific properties that cause us to react in predictable ways. But, what exactly are those properties, and can we predict the viewer's reaction? While playing music, I found the slight anticipation of certain beats (playing a note a little before it is due), heightens the response on a dance floor. Can we quantify that within a visual element such as the line? Are there cause and effect rules we can learn?

If a line deviates a little from the expected, the viewer's interest is piqued. *Orange Blandy* was an experiment in suggesting movement: Curving the vessel's centerline in the lower area required an adjustment toward the top to maintain balance. In the woodturning environment, bending things in this way is unexpected. A little asymmetry can be fascinating.

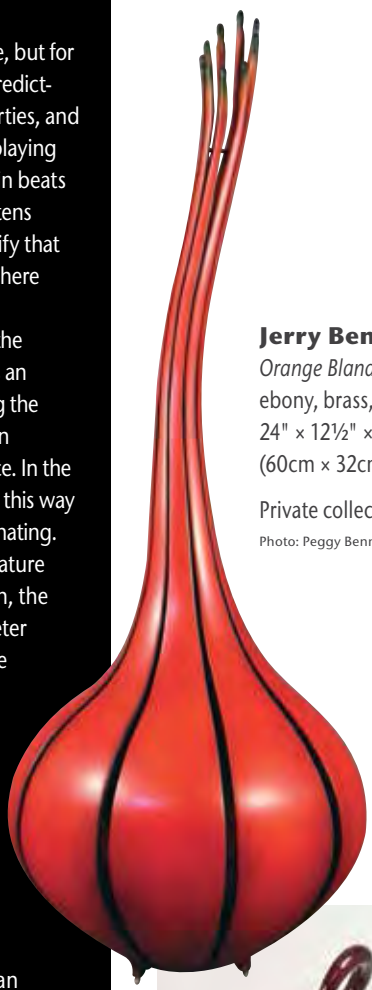
Varying the thickness of a line as the curvature changes gives it shape and a sense of motion, the principle behind *Tango Too*. The line's diameter increases as its curve becomes tighter. As the curve straightens, the diameter is smaller. This technique makes the line look dynamic and moving. It is the same concept used in calligraphy, and can be found in nature and mathematics.

What's your line?

The most-asked question from my friends is where to get ideas. We tend to think that the shape of physical objects is an ideal source, but for me, the most exciting lines are found while observing motion. Have you been to the ballet, or watched *Dancing with the Stars*? Mentally trace the movement of a single element, for instance, the hand. Observe the line made by an orchestra conductor's baton, or the paw of a cat after a string. Have you seen the line created by a Lomcevac at an airshow? Lines are all around us. Try recreating a line of motion by bending a piece of soft wire into a similar shape. This is called *drawing* in 3D. It works. Movement is an unending source of inspiration.

Sometimes the best lines are right in front of us. Bill Luce creatively utilizes the lines found within a tree—*Skeleton Tube* is an ideal example of finding a line and making the most of it. Bill masterfully complements the lines in the wood grain with just the right vessel shape.

I must admit, when there is a big discussion about finishes or sharpening during a meeting, I am usually thinking about those mysterious lines. If I ever get them figured out, you will be the first to know. That is, if you promise to come by and help me sharpen my new gouge.



Jerry Bennett, *Orange Blandy,* 2006, Maple, ebony, brass, acrylics, 24" × 12½" × 12½" (60cm × 32cm × 32cm)

Private collection

Photo: Peggy Bennett

Jerry Bennett, *Tango Too,* 2011, Mahogany, maple base, steel, brass, acrylics, 21" × 10" × 14" (53cm × 25cm × 36cm)

Private collection

Photo: Peggy Bennett

New Zealand Symposium

Malcolm Zander

Glenn Lucas
Photo: Ian Connelly

In early October 2012, New Zealand held its first international wood-turning symposium, organized by a committee of ten from the South Auckland Woodturners Guild (SAWG), headed by Dick Veitch and Terry Scott. Nearly 200 keen turners attended, primarily Kiwis but with a significant contingent from what is commonly referred to in NZ as the "West Island" (aka Australia, some 1,400 miles away).

I was invited to demonstrate, along with Molly Winton, Kelly Dunn, and Alan Carter (United States); Glenn Lucas (Ireland); Doug Fisher (Canada); Guilio Marcolongo and Liz and Neil Scobie from Australia; and Alby Hall, Gordon Pembridge, Niki Marshall, Mike Davies, and Jasper Murphy from New Zealand.

Along with most of the attendees, we were all housed together in a boarding school a half-hour south of Auckland. We shared dormitories, classrooms, a large dining hall, and a gymnasium that served as a trade hall as well as an amphitheatre. This arrangement kept costs down (an important factor for retired hobbyist turners), made for a unique, intimately friendly atmosphere, and fostered much camaraderie. When you have breakfast, lunch, and dinner in the same room together, you quickly meet and talk to a lot of interesting people.

Many Kiwis and Aussies belong to the World of Woodturners (WoW) online forum, so as is the custom, a WoW swap took place, and some 30 WoW-ies exchanged pieces they had brought with them. We posted photos of the exchanges on the WoW forum site that show many happy campers pleased with their new acquisitions.

Instant Gallery

Symposium organizers asked Molly Winton and me to do the critique of the Instant Gallery. We were taken

Demonstrator Niki Marshall uses a large tungsten carbide-tipped saw to cut the block of limestone into a manageable size for turning. The three vases on the piece of limestone illustrate what Marshall makes out of the slab.

Photo: Ross Johnson

WoW-ies (World of Woodturners online forum)

Photo: Ian Connelly

Doug Fisher

Photo: Ian Connelly

Molly Winton

Photo: Ian Connelly

Neil Scobie

Photo: Ross Johnson

aback by the high quality of the work on display. The craftsmanship and finishes were invariably impeccable, and we saw some truly unusual and imaginative pieces. My only criticism was that some were seriously underpriced.

Ken Dick's (Australia) shallow sheoak bowl caught my attention with its crisp clean edges, striking figure, and flat rim, cleanly embellished with randomly pierced holes ranging from about ⅛" (3mm) to 1/32" (1mm). The pierced design complemented the bowl beautifully in an understated way. I commented to Molly, "Look at that—constellations in a night sky." The next day as I was standing next to the bowl, Ken Dick approached. When I complimented him on the piece, he replied, "Well, I was out in the Australian desert one night, and looked up..." He didn't need to say anything else.

Brian Hawkins brought two lovely little bowls with metal leaf centers perfectly applied. He created each bowl's unusual border by applying paint into a groove around the leaf center, and then spinning the piece on the lathe so the paint flew outward toward the rim. Molly Winton snapped up one of these bowls, and Alan Carter quickly bought the other. I missed out.

Dick Veitch displayed several oak burl vessels that brought to mind Christian Burchard's madrone vessels. They were turned wet, then dried, sandblasted, stained, and sanded.

The quiet elegance of Phil Quinn's piece belied its true nature. A delicate series of patterns ornamented the surface which, when the piece was turned over, extended right across the base. Quinn hollowed the interior from the underside, cleverly masking the plug. The asymmetry of the form added extra interest.

Roger Dean's pine bowl, made from laminated sheets of pine, boasted awesome carving. Roger carved the chain links in the center portion using a simple whittling knife.

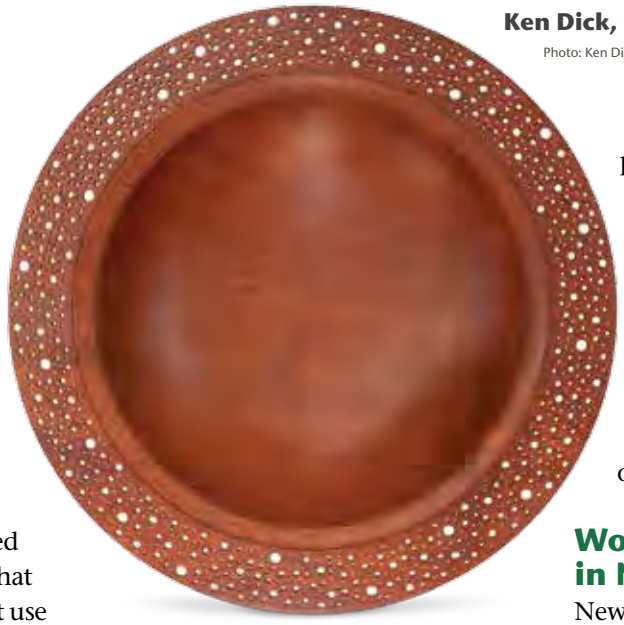
Other noteworthy pieces deserve mention: Tony Waterson's most unusual small bowl turned from a rotted crotch and then pyrographed to feature the imperfection; Terry Scott's dramatic miro platter; Bruce Cowley's intricately carved miro bowl with exquisite workmanship and pyrography; Peter Williams's simple but elegant bowl from 40,000-year-old swamp kauri; Bruce Wood's asymmetrically hollowed and pyrographed rimu sphere; and Colin Parkinson's metallic *thermette* (a classic Kiwi camping item for heating water over a fire) in true Gerrit Van Ness style, complete with a white enameled tin mug, a chip on its base—except both were all pine. Masterful.

The abundance of interesting work included a display of spoons, with two exceptionally fine examples by Leith Gray and Ken Newton. Spoon collector Norman Stevens invited attendees to submit spoons for possible purchase and also sent a selection of spoons from his collection for display. Stevens, from Connecticut, bought six spoons from photographs of the ones in the Instant Gallery. ▸

Evening festivities

After supper on Saturday night we all gathered on the bleachers in the gymnasium to find out what kind of show Terry Scott had planned for the evening. Details were secret. Two teams of demonstrators were told to show up, with no further instructions. The Possum Pie team consisted of Down Under turners Guilio Marcolongo, Neil Scobie, Alby Hall, and Gordon Pembridge. The French Fries team had Glenn Lucas, Doug Fisher, Molly Winton, and Alan Carter. Each team was stationed at a large lathe and then informed that within forty-five minutes they must use the contents of a large accompanying box to prepare a luscious meal. The most appetizing meal would be decided by audience applause.

Included in each of the two boxes was a large square of the gnarliest piece of dry, difficult-to-turn kauri wood Terry Scott could find. Grain ran in all directions. The objective apparently was to give the demonstrators a hard time in public. Even though the wood proved to be no obstacle for Glenn Lucas and Guilio Marcolongo, two of the most skilled turners in the business, a more entertaining and educational approach would have been the use of solid green wood.



Ken Dick, Untitled, 2012, Sheoak, 2½" × 12" (6cm × 30cm)
Photo: Ken Dick

For the Possum Pies, Neil Scobie carved impressive bananas and Gordon Pembridge airbrushed a large paper hanging lamp to make a realistic pumpkin. But the French Fries team was up to the challenge, producing among other things a plate of painted wood shavings and small spheres to make a fine spaghetti and meatball dish, a painted cheese log with a small brown wooden mouse (chocolate mousse?) attacking it, along with a platter of colored plastic fruit surrounding an inflated white vinyl glove, digits sticking straight up—finger food! The audience voted enthusiastically in favor of the French Fries team.

Terry Scott, assisted by Kelly Dunn, provided hilarious running commentary. It was a lot of fun and great entertainment!

Woodworking in New Zealand

New Zealand must have one of the highest per capita percentages of woodworkers anywhere. Two reasons may be the abundance of unique indigenous woods, and the do-it-yourself culture of Kiwis. (Okay, Aussies too). The NZ National Association of Woodworkers lists no less than forty-one woodturning or woodworking clubs or guilds. This, in a country with a population of just 4.5 million, a little more than the size of Los Angeles.

The Aoraki program also significantly contributed to the high level of work in the Instant Gallery. It is a structured training program of courses

Dick Veitch, *Pots,* 2012, Oak burl, tallest, 8" × 5½" (20cm × 14cm)
Photo: Dick Veitch

Bryan Hawkins, Untitled, 2012, Rimu, variegated brass leaf, India ink, acrylic paint, 2" × 3¾" (5cm × 10cm)
Photo: Dick Veitch

Roger Dean, *Chain Link Bowl,* Pine, 5" × 8" (14cm × 20cm)
Photo: Dick Veitch

Terry Scott *(left)* and Doug Fisher ham it up at the Saturday night team competition

Photo: Ian Connelly

Finger Food by French Fries team, turned platter, plastic vegetables, inflated vinyl glove

Photo: Ross Johnson

developed by the Aoraki Polytechnic in collaboration with woodturners from Christchurch, Auckland, and other clubs. It consists of a series of modules, some obligatory and some elective. Those completing the program earn a Certificate in Woodturning. The evening prior to the symposium opening, demonstrators attended a ceremony held in the SAWG clubroom to mark the graduation of eight club members from the Aoraki program. Graduates displayed pieces they made, representing a variety of styles. All were of high quality. One graduate told me the program had made him a more complete woodturner because it took him out of his comfort zone by requiring him to make pieces and use techniques he would not otherwise have attempted.

Throughout the symposium, participants commented that the Aoraki program has raised the national standard of woodturning in a major way over the last four years. This program offers a potential model for AAW local chapters. As Terry Scott says, "We have seen an increase in the show-and-tell competitions being entered, and the quality and quantity of work. Speaking for myself and other tutors, the course has been an amazing journey as we have learnt skills we wouldn't have learnt if we had stayed in our own environment. My own demonstrations have also seen an improvement as I've learnt how to better convey what I am trying to put across."

For a summary of the Aoraki program courses, download the file "Aoraki Course Information" from the AAW website at woodturner.org/products/aw. Detailed learning outcomes may be obtained from Dick Veitch, dveitch@kiwilink.net.nz.

Symposium handout book

Dick Veitch, symposium chair, put together a professional handout book, photographed all the pieces in the Instant Gallery, and ran the auction, which was held on the final day. The proceeds of the auction—nearly $4,000—were donated to the St. John's Ambulance organization, whose youth provided snack food and coffee/tea during the breaks between rotations.

Congratulations on an excellent job to Dick Veitch, Terry Scott, and the SAWG committee and club volunteers. Judging from the numerous enthusiastic comments from the attendees, this first NZ international symposium will be followed by others. ■

Malcolm Zander is a Canadian who was born in New Zealand. His website is malcolmzander.com.

Phil Quinn, *Green Vase,* 2012, Macrocarpa (Monterey cypress), 14½" × 3½" (37cm × 9cm)

Photo: Dick Veitch

Photo: Phil Quinn

Leith Gray, Untitled spoon, 2012, Arbutus unedo (Irish strawberry tree), 8⅜" (21cm) long

Photo: Dick Veitch

{NEIL TURNER}

Cornelia McCarthy

Fireform, 2008, Sandalwood, 14" × 12" (35cm × 30cm)

> **A determined soul will do more with a rusty monkey wrench than a loafer will accomplish with all the tools in a machine shop.**
>
> —Robert Hughes, art critic and author

No crops to harvest. No newborn lambs to feed, but Australian Neil Turner, farmer-turned-artist, will sow creative seeds at the International Turning Exchange (ITE) in 2013.

Anyone who meets Neil will introduce him to others as the Australian who sold his farm and is now a wood artist. His connection with the land is a conversation starter and a major theme in his work. "Unfolding," his solo exhibition in the Bunbury Gallery in Western Australia in 2012, explored the elements he observed for decades: wind, fire, water, and earth; poetically captured in sculpture and furniture.

An important sculpture in this exhibition was *Containment*. It is more than a little autobiographical. Embodied in this skillfully turned and carved piece is an artistic spirit, inspired by nature's patterns. It is reminiscent of a bronze casting just released from the mold, metal sprues still attached. Represented are two concepts of containment: a container in the form of an ancient round-bottomed vessel, and a frame-like cage in the act of containing. Tension is successfully achieved.

Containment, with its nature-inspired pattern worming its way in shallow grooves around the piece, shows a new motif that appeared since his recent move to the Australian coast—coral patterns and ripples in the sand left by outgoing tides. In earlier work, we see the gentle pattern of ridges and troughs left by the wind as it sweeps over the soil.

Sleeping Sea Spirit II, 2012, Jarrah 33½" × 12" × 63" (85cm × 30cm × 160cm)

Neil's attraction to wood

When he started turning in the 1980s, Neil discovered a natural talent for transforming big lumps of wood into functional items. Work that was more artistic followed, to the delight of his wife, Suellen.

Australian timber such as sheoak is important to Neil. His use of local species was just one of the reasons he was offered a solo show in Bunbury. Gallery director Sonya Dye knows that regional wood is culturally important. "Environmentally, we in Western Australia are often defined by it," she says. "It was a key element that propelled our early economic development, and our woods and timbers,

along with our forests, continue to be something on which our community places great value."

Neil's journey: farmer-turned-artist

When Neil started turning, sourcing timber did not mean selecting and buying pre-cut blanks of seasoned timber. He found what he needed in the ground on the farm. And, there were rich pickings—once he knew what to look for.

Imagine ploughing on a frosty morning. Round and round the gray-brown paddock, turning the earth, the plough leaving big clods. Then, thunk! You hope it's not a stone or a log. You get off the tractor and have a look—there is damage to the plough blade from the root of a gum tree, long ago growing in the earth.

Back to the shed: Hose off the outer stones, chainsaw extraneous roots, wire brush off the soil, have a look, and you discover the stump of a York gum tree, extremely difficult to turn.

This *determined soul* was innocent of the hazards of turning big root balls. Neil would often tackle such pieces on his shopmade lathe, the grinder constantly on to keep tools sharp. A lathe sturdy enough to actually turn the piece would not be known to Neil for many years, so he would try his best to tame these rotating bucking broncos. The first piece of mallee (eucalyptus) he ever turned flew off the shopmade lathe at 700 rpm and rolled right out of the shed.

Persevere with the lump of wood, and the beauty of the grain becomes visible. The form of the trunk and root dictates the shape of the finished piece as it is turned, cleaned, and transformed. An exciting journey of discovery and creativity hummed in that machine shed on clear starry nights.

Hidden Spirit, 2012, Sheoak, blackbutt, silver, 29½" × 59" × 22" (75cm × 150cm × 56cm)

A curious spirit

In the 1990s, Neil took a few wood-turning courses where he met professional Australian turners Stephen Hughes and Vic Wood. Learning new skills came with no difficulty for Neil, and he began to produce hollow vessels, magnificent platters, and ripple-edged bowls.

Working with confidence during this time, Neil produced his first *Fireform* in sheoak and later created two-piece *Fireforms* in sandalwood. The delicacy shown in these freestanding sculptural works also found its way into natural-edge and pierced bowls and vessels; the elements of fire, water, or wind reflected in flowing curves.

The work brought the opportunity to participate in gallery exhibitions throughout Western Australia, and at the high-profile Sculptural Objects & Functional Art (SOFA) events in New York and Chicago.

To a young farmer on a remote and busy farm, with few outside influences, pursuing a life making art must have seemed an impossible dream. But, the seeds of becoming a full-time artist ▸

Untitled, 2012, Tuart, 5" × 10¼" (13cm × 26cm)

Untitled, 2012, Salmon gum burl, 6" × 21¾" (15cm × 55cm)

The process of creating *Containment*

Neil Turner, *Containment,* 2012, Sheoak, 10" cube (25mm)

Intrigued by Terry Martin's skillful *Vessels in a Box* (1998), Neil turned and carved this sculpture out of one chunk of wood. He likes that people will scratch their heads, as he did seeing Terry's work: *How did he do that?*

A three-sided jig holds the timber in place while on the lathe.

The jig will accurately align the cube between centers.

The cube is placed against the three-sided jig and turning begins.

When enough material is removed using the lathe, carving begins. Care must be taken not to lose the arms that connect the frame to the vessel form.

A jig made of MDF keeps the upside-down drill in place as it follows the template below. The vessel form is emerging within its cuboid frame.

The interior is turned creating a hollow form. After removing the three-sided jig, the piece is close to its final shape.

Considerable hand carving and sanding is required around the connecting branches.

After he pencils in the coral pattern, channels are painstakingly carved and then completed using a power carver with a rotary bur.

Thin lines carved across the grooves create an optical illusion, as though a marine creature crawled across the surface and left swirly deposits.

were well rooted. By the late 1990s, there was no doubt in Neil's mind that one day he would study wood and immerse himself in its grain.

Diving in!

In 2010, living his dream, he enrolled in the School of Fine Wood in Dwellingup (Western Australia) and began a two-year Fine Furnituremaking course. This gave him the opportunity to engage fully in creating with wood and to meet skilled tutors. The experience opened his eyes to design and technique and nourished his curiosity. Challenged and inspired, Neil refined his artistic style.

While all this was happening, Suellen oversaw their move from interior Wheatbelt to coast, farmstead to studio. Continually developing and seeking new pastures, in 2013 he will see a great deal of travel, to Europe and the United States, meeting fellow artists, working and creating along the way. Neil will develop new ideas, new work, and new friendships, generously sharing ideas throughout the journey. ■

Photos by Victor France

Cornelia McCarthy works with and often writes about creative people, and the interesting places she visits. She lives in southeast Ireland, but her curiosity leads her to explore cultural stories worldwide through Internet research. She wrote the catalog essay for Neil Turner's show, "Unfolding."

Neil Turner, 2012

Members' Gallery

Organic Wisconsin Cow Pie

Roger Zimmermann

This pie is carefully made from the finest of trees. Not for the sheepish beginner, making this pie requires experience at woodturning and sharp tools. It is a great dish for vegans—no actual cows were harmed in the making.

Recipe

PIECRUST

Cut a piece of 2"- (5cm-) thick black walnut into the shape of a pie tin. A piecrust looks scrumptious made out of maple burl. Use a Dremel tool to drill vent holes in the crust. With the same Dremel, sand a crimp pattern around the edge of the crust.

Chuck a 1"- (2.5 cm-) square piece of bloodwood onto the lathe and form a round, plump cherry. Attach a stem to the cherry—I used an expensive slice of ebony. Affix the cherry onto the top of piecrust.

COWS

The profile-turning (ring-turning) method makes enough cows to fill your pie. Turn a 14"- (35cm-) diameter 2"- (5cm-) thick disk from pine or wood of your choice. Insert into the disk a likeness of a cow silhouette. (For instructions on profile turning, see *AW*, vol 26, no 6.)

Attach the ring to your lathe and turn away all the wood that is not the silhouette of a cow. Carefully slice off cows using a sharp bandsaw blade. Vary the width of each cow to give the appearance of different-size cows. Paint the bovines. Acrylic paint works well.

When dry, carefully moooove cows into the pie pan and gently cover the herd with the piecrust. Leave room for each cow to breathe.

Coat with your favorite finish. The pie will last a lifetime and can be passed on to future generations of cow lovers. Serves many.

Cow Pie, 2012, 4½" × 7" (11cm × 18cm) dia

MEMBERS' GALLERY

A Penturner's Journey

Bruce Robbins

In the fall of 2005 my wife Linda and I were trying to come up with a holiday gift idea for some friends. I knew a few people who made pens and I decided to take a pen-turning class at the local Woodcraft store. The class was fun, so I bought a few pen kits and accessories and fired up my old Shopsmith Mark V, which was sharing space in our utility room with the washer and dryer. Fast-forward to today and the Shopsmith shares space in a backyard workshop with a few other tools including a DIY 4-axis CNC mill. Most of the kits are long gone—I now fabricate many of the metal components such as clips, center bands, nibs, and finials.

As is the case for many novice pen turners, my first pen was a classic Slimline ballpoint. The kit came with two brass tubes, a transmission, a center band, a clip, a metal finial, a metal nib, and a Cross-style refill. The instructor gave us a piece of maple about ¾" (20mm) square and 5" (127mm) long. We cut the wood in two, drilled holes down the center, and glued in the brass tubes. After squaring the ends with a pen mill, we loaded the tubes onto a mandrel with bushings. It had been a long time since I used a spindle gouge, but I managed to turn the wood until it approached the diameter of the bushings, sanded through a few grits, and applied friction polish. The nib, finial, center band, and transmission were pressed into the brass tubes. I had my first pen and I was hooked!

Exploration

My second stage of pen turning was exploration. Although the canvas is small, there are many materials and styles available. Pens can be made from a range of plastics, an infinite variety of wood species, beautiful burls, polymer clay, and soft metals. Two of my favorites are ebonite (hard rubber) and celluloid, both of which were used on many vintage fountain pens. I mastered one of a thousand published methods on how to apply cyanoacrylate (CA) glue as a finish. I experimented with segments, inlays, and even began casting my own plastic blanks. Show me a pen turner in this stage and you will see someone who looks at the furniture in the room and wonders how it would look as a pen. Everything imaginable—snakeskins, coffee beans, macaroni—have been embedded in castable resin and turned into a pen. I learned about roller balls, dip pens, and fountain pens. I bought many of the available kits from plain to ornate. At that point, I could make a fairly decent pen in a few hours. While this was initially satisfying, I knew if I were to keep this hobby, I needed to be more creative, take more time to develop my own style, and not just have a shoebox filled with look-alike pens. Besides, I was running out of friends and relatives.

Before advancing further, I realized I needed a few more skill sets. I was leaning towards rollerball and fountain pens, which have two pieces that screw together. If I wanted to eliminate kit parts, I needed to be able to cut threads. With some research, I discovered that threads on pens are not the typical type we see on nuts and bolts—most are multi-start. As the name implies, these have multiple start points, each with a longer pitch so that with each twist, the part moves farther. With a triple start, opening or closing a pen is three times as fast and the holding power is the same as with a single start.

In practical terms this meant finding a few other adventurous pen makers to share the cost of some custom-made taps and dies with the logic that we would be saving money on kits. I later learned to cut threads on my CNC mill and avoided buying multiple sets of taps and dies when I want to make smaller or larger pens.

Fabricating metal components

Next was learning to fabricate metal components. I immediately saw the connection to jewelry making, so I signed up for classes at the local visual arts center. After a few rounds

Many turners use a basic Slimline pen kit to make their first pen. Add a little wood or plastic, and the pen is only an hour or two away. The kit includes all the parts except the barrel material to make a simple ballpoint pen.

Getting away from kits will sooner or later require some basic jewelry-making skills. Here I am attaching a washer-style attachment piece to the back of some clips.

Successfully cutting internal threads in the cap for a two-piece pen requires the tap to be parallel. Holding the tap in a drill chuck in the tailstock and the cap in the headstock while turning by hand makes easy work, after a little practice.

A carved, simulated three-dimensional basket-weave texture onto a pen barrel is another example of the beauty of a mathematical pattern.

of the basic techniques followed by more advanced lost-wax casting and a workshop in Mokume-gane (mixed-metal laminate), I began to fabricate clips and other parts. My tool collection grew to include jeweler's saws, files, a soldering torch, and a small rolling mill. My Shopsmith hosted many pieces of metal, but finally I succumbed and purchased a metal lathe. A metal lathe is not a necessity, but sure helps when making precision round metal parts.

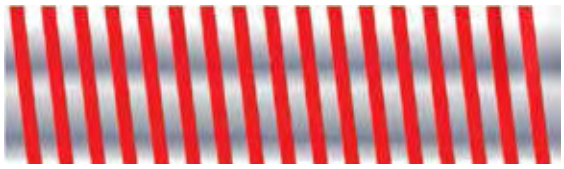
Design

As with any product, the three components of manufacturing are materials, process, and design. While design usually dictates what materials and methods to use, having a wide selection of each from which to choose is a great benefit. The pens I now make each start with a theme or story, and for the most part are limited editions of one. I begin by sketching a few designs either in my notebook or on a CAD program. I usually make a few prototypes to see if my vision in practice looks as good as my virtual models. Sometimes the color needs tweaking on a cast blank, the CNC code is a little off, or the proportions just do not look right. I rarely have a finished product without four or five attempts, and my shoeboxes are now filled with these reminders. I make far fewer pens, yet each is more satisfying.

Connecting with friends

This journey would not be nearly as fulfilling without the many friends I met along the way. Not long after making a few pens, I joined the local AAW chapter in Richmond, Virginia, and its sub-group of Richmond Penturners. Thanks to Internet forums like the International Association of Penturners, penturners.org, I am in contact with pen makers from around the world on an almost daily basis. Some, like me, do this solely as a hobby, some sell their wares at craft shows and other venues, and a few even make a living from it. We all share the same passion, joy, and excitement of seeing someone write with pens from our workshops.

Bruce Robbins has been working with wood, often combining it with other media, off and on since childhood. Often preferring to make rather than purchase gifts, pen making has become the perfect avocation to provide useable art for many occasions and celebrations. ▶



Single-start thread diagram.

Triple-start thread diagram. Each color represents a starting point for the threads to engage. Note that the pitch for each start on the triple-start is three times as long as a single-start. The net result is one turn of the triple-start moves the part three times farther than on a single-start, yet the holding power is the same.



(Left) My first pen, 2005.

(Middle) Prairie rattlesnake skin cast in polyester resin in a Baron-style kit pen, 2006.

(Right) The *Viola,* 2007. I use a rotary laser to custom cut the pieces of the viola inlay from a design I created. The woods are all true to the instrument: quarter-sawn Sitka spruce for the top and ebony for the fingerboard and tailpiece, which are in relief. I used fiddleback maple for the back of the instrument, which is inlaid 180 degrees from the top.



(Left) Abalone, 2008, is one of my early ventures into the world of pens without a kit. I aligned pieces of shell along a black ebonite core. I filled the spaces with thin CA glue to allow a black reflection. The clip is sterling silver.

(Middle) Vintage Parker Vacumatic fountain pens inspired the blank and sterling clip of this 2008 pen. I alternated thin slices of cast polyester resin with pearlescent pigments with black. Although it was time consuming, I achieved the look I was after.

(Right) Tree Hugger, 2008. Mounted on a background of rosewood burl, this clip was my first piece made by lost-wax casting.



(Left) A vintage Parker pen inspired this 2010 design on the lower barrel, made with corrugated cast resin and hard red rubber. I used a CAD program to design the clip and center band, carved it in wax on my 4-axis CNC, and cast it in silver. It is my first attempt at gold plating.

(Middle) Illusion, 2011. The black lines, suggestive of complicated segments on the cap of this pen, were carved with a 1/32" (0.80mm) end mill on my CNC and filled in with polymer clay. I brought out my high school geometry book to calculate the code for the pattern and got it right on the first try. The materials are amboyna burl and black ebonite.

(Right) The Storm, 2011. Having just completed a class in Mokume-gane, I incorporated my newfound material into the metal components of this pen. The clouds in the cap and raindrops in the lower barrel were the results of many casting experiments to get the colors I wanted. I designed the shapes in a CAD program, carved them out on the CNC, and filled them with various combinations of pigments and dyes in resin before turning to final dimensions. ■

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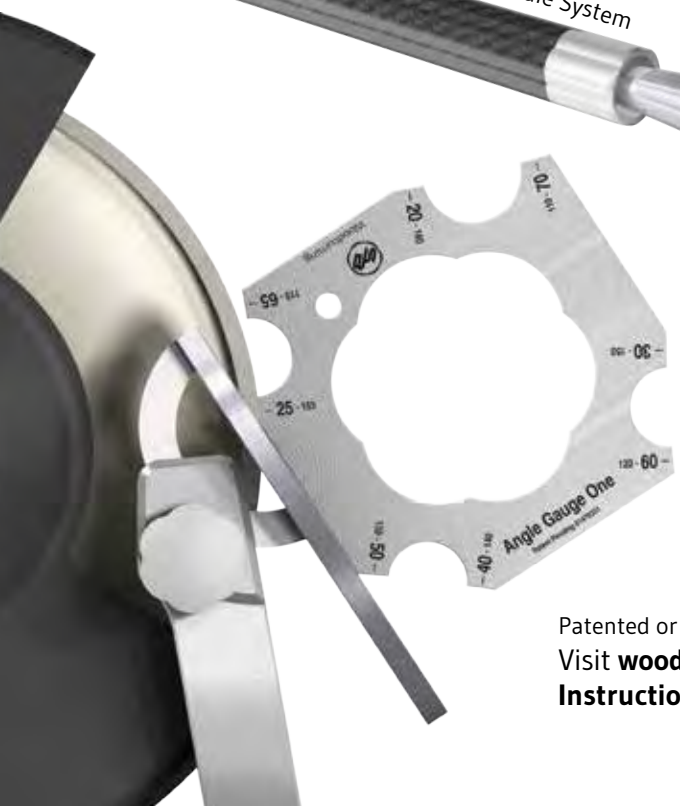

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BILL HASKELL

CROSSCURRENTS

I employed the lost-wood technique to create this elliptical form and was inspired to carve the design by work I saw in Tokyo at an exhibit of master Japanese craftsmen. I especially appreciated several wood pieces that contained simple, exquisite flowing lines, from which I sketched designs to adapt to turned forms.

The black walnut wood came from an old tree ravaged by a devastating windstorm in 2011 that downed more than 230 trees at the Los Angeles County Arboretum and Botanic Garden. This tree was planted sometime in the last half of the 19th century in the San Gabriel Valley on the massive ranch of E. J. "Lucky" Baldwin. Baldwin's ranch included what today is the Santa Anita Race Track and park, plus the LA County Arboretum and Botanic Gardens. The Arboretum offered logs to local woodworkers in exchange for finished pieces for a fundraiser.

Crosscurrents is in the AAW's exhibit, "Currents," showcased at this year's international symposium in Tampa. To view the entire exhibit online, visit galleryofwoodart.org.

Crosscurrents, 2013, Black walnut, 7½" × 3½" × 2½" (19cm × 9cm × 6cm)
Photo: LOV Photography