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AMERICAN WOODTURNER

Journal of the American Association of Woodturners

October 2013 vol 28, no 5 • woodturner.org



THE HISTORY

OF WOODTURNING

AND MAGIC

HARMONY

NATURAL-EDGE

BOWLS





Professional Outreach Program Instant Galer
Tampa Symposium 2013 ervawards

Excellence Awards





(Clockwise from top left)

Michael Kehs,

Paleo Rising, 2013, Silver maple, 6" × 7" $(15cm \times 18cm)$

Collection of Richard and Elizabeth Hogue

Avelino Samuel,

Untitled, 2013, White prickle, purpleheart, ebony, 12¾" × 6¼" (32cm × 16cm) Photo: Andi Wolfe

Andy DiPietro,

Entwined, 2013, Spalted elm, 15" × 24" × 15" (38cm × 61cm × 38cm)





Youth Award

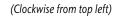
Treden Bosch, Wood-Fired Pizza,

2013, Elm crust, maple sauce and cheese, bubinga pepperoni, 10" (25cm) dia

Photo: Andi Wolfe







Alan Trout, Simplicity, 2013, Acorn caps, resin, $151/2" \times 61/2"$ (39cm × 17cm) Collection of David and Karen Long

Lars Stole, *Phase Shifts,* 2013, Maple, Douglas fir, $11" \times 16" \times 9"$ (28cm × 41cm × 23cm)

Michael and Cynthia Gibson, Sweet Tea, 2011, Bradford pear, 7" × 9" (18cm × 23cm)

Private Collection



Dedicated to providing education, information, and organization to those interested in woodturning

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Journal of the American Association of Woodturners

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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



My neighbor is unable to take care of her yard, so occasionally I help. Recently, when sawing small brush stumps, I carelessly cut my finger, giving myself a puncture wound from one of the long teeth on the curved handsaw. I continued to work in the yard; my finger seemed fine.

Later that evening when doing some editing, Jim Andersen's "Clean Minor Wounds" article drew my attention. As I edited, I began to pay more attention to the cut on my finger and noticed redness underneath. And, my finger was beginning to hurt when I applied pressure. Realizing I had not cleaned the wound, I headed to the medicine cabinet for peroxide and antibacterial ointment. Thank you, Jim, for your timely article, which may have saved me from a more serious condition.

There is magic in store for readers in Stan Wellborn's article, "Deception by Design, the Long

History of Woodturning and Magic." For many turners, Stan's article will generate increased interest in sleight-of-hand creations.

David Fry's review of Binh Pho's exhibit at the Mobile Museum of Art reveals much about the work of this dynamic, creative artist. I have long appreciated Binh's enthusiasm and positive, can-do attitude. It would take that and more to prepare for such a massive exhibit. Congratulations, Binh.

Believe it or not, the holidays will be here soon and for woodturners who search for new ornament designs, this issue contains four creative possibilities. There is plenty of time before treedecorating season to try your hand at several ornament styles. But, when you cut down your Christmas tree, be careful with the handsaw (or keep the ointment handy!).

Betty Scargino

-Betty Scarpino

Remember to Vote!

AAW Board Election

Candidate statements appear on AAW's website in the Members' Area and also in the August issue of the journal.

There are two options for voting: (1) by electronic ballot, available at woodturner.org/BoardVote or (2) by paper ballot, included in your August journal.

Ballots must be cast electronically or received in Saint Paul no later than midnight CST, October 18, 2013.

We encourage you to vote and hope you take the time to help make this election turnout significant.

President's Letter



After the Tampa symposium, Phil McDonald conducted a follow-up survey of attendees. The feedback will be incorporated into the planning of the Phoenix symposium to help

make it an even better event. AAW's staff and Board of Directors would like to thank everyone who volunteered at the Tampa symposium. All the members who worked together made this gathering a success.

Last year's challenges led to positive changes with the hiring of Phil McDonald as Executive Director. With his strong business background, abundant energy, and problem-solving skills, Phil is overseeing major changes in how the AAW operates and improving many AAW programs. Our membership is up more than 750 from last year. Changes made to financial systems have improved stewardship and governance, and this year brings a significantly improved financial outlook.

The Board and Executive Director started planning for the 2014 budget year

by having a strategic planning session at Tampa in June. We covered future priorities in the following areas: ongoing financial stability, facilities needs, membership projections in five years, a review of publications, an examination of all parts of the symposium, and AAW's position in the art and craft world. Strategic planning is an ongoing priority.

Board member Lou Williams and Board Advisor John Hill announced a new scholarship program for AAW members. The income from AAW's endowment investments, paired with scholarships from Arrowmont School for Arts and Crafts and John C Campbell Folk School, will provide twenty-seven scholarships for AAW members. The AAW also supports other programs that benefit members and local chapters: EOG, Woodturning FUNdamentals, the Youth Program, an online gallery sales site, and insurance. Your membership dues come back to you in many ways!

Tom Wirsing's July Board letter pointed out two legacy scholarships that are active today because of past symposiums. The late Dale Nish helped establish a scholarship at Brigham Young University after the 1992 AAW symposium at BYU and Lee Carter helped establish a scholarship at Colorado State University after the 1994 symposium in Colorado. Both men used their background in education, along with funds from the symposiums, to plan for the education of future woodturners. What kind of legacy will you leave for the woodturning community?

We come together within the AAW from all backgrounds to share a love of woodturning. I ask you to consider what woodturning brings into your life, and then think about how you can support the AAW and its ongoing programs. One of AAW's priorities will be to build on our existing endowments. Your contributions to endowments will benefit future young turners. Woodturning enriches our lives, brings friendships with other woodturners, and gives us pride as our skills improve.

Dale Larson,

AAW Board President

Letters to the Editor

Send letters to editorscarpino@gmail.com. Letters may be edited for length and clarity.

Instant Gallery Concept

When I first started attending local chapter meetings in 1993, I watched demonstrations, checked out books from the library, and eagerly looked at the wide variety of items in the instant galleries. A pivotal moment happened when I noticed a simple perfume bottle, the first item that inspired me to make dozens of the same object. I discovered different woods and shapes with the hours and hours I practiced. This all happened because someone

took a risk and put something they made in the instant gallery.

We all like to hear positive comments about our work. I realize it can take a certain amount of daring to put your work on display. Sometimes the recognition we desire doesn't happen. Or worse, someone might say something insensitive. In our club, we know who wants constructive criticism and we try to be sensitive and helpful with

our remarks. Many of us have learned significant lessons from critiques, realizing it's a chance to grow.

Instant galleries should not be considered competitions. Most woodturners in local chapters are hobbyists who share a love of woodturning. Everyone is a good enough turner to put work in an instant gallery. You never know who might be inspired.

—Pat Matranga, Tennessee

Scholarships to Woodturning Schools

For Local Chapter/AAW Members

The AAW is pleased to announce a new program that will award twenty-seven scholarships for selected AAW local-chapter members to attend classes at either John C. Campbell Folk School, Brasstown, North Carolina, (folkschool.org) or Arrowmont School of Arts and Crafts, Gatlinburg, Tennessee, (arrowmont.org). Under the program, the AAW Endowment Trust Fund (ETF) and Arrowmont will make available funds for fourteen \$550 scholarships at Arrowmont. In addition, the ETF, working with Campbell School, will award thirteen \$594 scholarships. In total, \$15,422 in scholarships will be given to AAW members.

To apply for a scholarship, nominees must be AAW members and be nominated by their AAW chapter. Star Chapters will be allotted two nominations for the first fifty members and one additional nominee for each additional fifty members. Regular chapters will be allotted one nomination for the first fifty AAW members in the chapter. After that, each additional fifty AAW members will allow another nomination. If more than twenty-seven members are nominated, a drawing will determine the winners.

The program provides tuition only. Room, board, and travel are the responsibility of the winners. All awards will be for courses in 2014.

Chapters must provide the names of nominees, the number of chapter members, and the number of AAW members in the chapter to Phil McDonald, phil@woodturner.org, in Saint Paul, by November 15, 2013. Winners will be notified by December 2, 2013.

Robert Rosand, *Memory Platter,* 2013, Ash, bleach, paint



My wife, Susan, and I make memory platters, which are intended to replace guest books at weddings, funerals, birthdays, and special events. In memory of Dale Nish, who died earlier this year, we decided that the AAW symposium in Tampa would be an ideal place to pay small tribute to Dale by collecting attendees' signatures, and then giving the signed platter to the Nish family.

Dale will be missed by so many of us in the turning community.

-Robert Rosand

Call for Entries

2014 Juried Member Exhibit

The theme for the 2014 AAW juried exhibit is "Rising" in honor of our symposium host city, Phoenix, Arizona. We encourage you to interpret the theme and use any definition of rising for inspiration. All AAW members are eligible to enter.

Complete guidelines are on the AAW website and in the

August journal. Entry dates are from November 1 until February 3, 2014. Questions? Contact Tib Shaw at the AAW Gallery of Wood Art, tib@woodturner.org.



AAW Local Chapter Collaborative Winners

Thank you to the local chapters that entered the Chapter Collaborative Challenge (C3). All of the creations were excellent in their concept and execution. Congratulations to the winners! By vote of the attendees at the Tampa symposium, the results are:

- Best of Show, Wilmington Area Woodturners Association, North Carolina, Sea Fantasy
- Fantasy Award, Wilmington Area Woodturners Association, North Carolina, Sea Fantasy
- Artistic Award, Big Island Woodturners, Hawaii, Hawaiian Collection Pu-ahala Form
- Technical Award, Peace River Woodturners, Florida, 1904 Edison Phonograph





Artistic AwardBig Island Woodturners, Hawaii *Hawaiian Collection Pu-ahala Form*



Best of Show and Artistic Winner Wilmington Area Woodturners, North Carolina Sea Fantasy

Other chapter participants:

- Woodturners of Polk County, Florida
- Central Florida Woodturners, Wednesday Night Group
- Sun Coast Woodturners, Florida
- Michigan Association of Woodturners
- Northeast Florida Woodturners



Michigan Association of Woodturners SAA-WEET!



Northeast Florida Woodturners Beach Life



Central Florida Woodturners, Wednesday Night Group Anticipation of Flight



Woodturners of Polk County, Florida The Freedom Pen Project



Suncoast Woodturners, Florida Sea Odyssey

Chapter Collaborative Challenge 2014



For AAW's 28th international symposium in Phoenix, Arizona, the chapters and membership committee will again sponsor a Chapter Collaborative Challenge (C3).

Each AAW chapter is invited to submit one collaborative work created by as many chapter members as possible, with a minimum of six participants.

The complete rules for entry can be found on the AAW website at woodturner.org/sym/sym2014.

The pieces will be prominently displayed during the symposium in an area near the Instant Gallery. During the symposium, attendees will be invited to select, by ballot, their choice for Best of Show and their favorite piece in each of the three categories. Votes will be tallied prior to the banquet, during which the winners will be recognized.

This year, in addition to plaques awarded for the winner in each category, the AAW will provide one free symposium registration to each chapter that wins an award.



Apply for an AAW Educational Opportunity Grant

AAW's Educational Opportunity Grant (EOG) fund continues to be strong, thanks to the wonderful generosity of donors and buyers at our annual symposium auction. Funds are available for worthy proposals.

To be eligible, applications must be received by December 31, 2013. All AAW members are eligible to apply (except for recent recipients). You can complete the application form and review the guidelines at woodturner.org/resources/eog/.

The committee will not consider applications that are incomplete or vague. Please take care when applying. The following tips will help you with your application:

 Complete the application online at woodturner.org/resources/eog/.
 Only online applications will be accepted.

- Provide sufficient information so EOG committee members can clearly understand what you are requesting and how you intend to use the funds. Please be as concise as possible to make your points direct and clear.
- Include details of how you will use the funds. Specific needs should be itemized. Funds will not be granted for miscellaneous, incidental, or unspecified expenses.
- Explain your educational goal or experience you wish to obtain. Keep in mind that these grants are for educational purposes. In particular, please explain how others will benefit as well.

Grants are limited to \$1,000 for individuals and students and \$1,500 for local chapters, schools, and nonprofit organizations. Your budget may exceed

these limits; however, your grant request should not exceed EOG limits. For special situations, at the discretion of the EOG committee and the AAW Board, grants are available in larger amounts. In addition to EOGs, the committee will award ten certificates for registration to AAW's international symposium.

If you have questions, contact the EOG committee chair or the AAW office. The AAW Board encourages you to take advantage of this membership benefit.

Kurt Hertzog, EOG committee chair kurth@woodturner.org

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.

Prize Drawing for AAW Members

One of the many benefits of membership in the AAW is our monthly prize and yearend grand prize drawings. Thank you to the vendors who donated this year's prizes, which include tuition scholarships, \$100 certificates, sanding supplies, DVDs, chucks, grinding jigs, symposium registration, and lathes! Contact Linda Ferber if you would like to contribute a prize, linda@woodturner.org.

When you patronize our vendors, please thank them for their support of the AAW. Visit our website at woodturner.org/org/mbrship/drawings_winners.htm to see each month's prizes and winners.

At the end of 2013, we will draw another name from our membership roster to give away a Powermatic 3520B lathe. That winner will name a local chapter to win either a JET 1642 or five JET mini-lathes. The Powermatic and JET lathes are donated by Walter Meier Powermatic/JET. Included is free shipping in the continental USA, or up to a \$500 allowance for international winners.

2013 Donors

(Others may be added during the year.) Anderson Ranch Arts Center, andersonranch.org Arrowmont School of Arts and Crafts, arrowmont.org Craft Supplies, woodturnerscatalog.com David Ellsworth, ellsworthstudios.com Easy Wood Tools, easywoodtools.com Hunter Tool Systems, hunterwoodturningtool.com John C. Campbell Folk School, folkschool.org Mike Mahoney, bowlmakerinc.com North Woods - Figured Woods, nwfiguredwoods.com Oneway Manufacturing, oneway.ca **Tennessee Association of Woodturners** symposium registration Thompson Lathe Tools, thompsonlathetools.com Totally Turning/Showcase Symposium, totallyturning.com Trent Bosch, trentbosch.com Walter Meier Powermatic/IET,

Woodturning Design magazine, woodturningdesign.com

powermatic.com and jettools.com



Mid Atlantic Penturners Gathering EOG at Work

Bruce Robbins

In 2012, a small group from Richmond, Virginia, Penturners began discussing the possibilities for creating something larger than our fifteen-member, bi-monthly meetings. We were soon joined by a couple from the Tidewater area and began a journey that eventually led to what we hope is the first of many Mid Atlantic Penturners Gatherings. Not knowing if we could attract more than fifty attendees, we explored local venues, only to experience sticker shock and insurance worries. More interested in attendance than in trying to break even, we decided to have the event open to the public with free admission and gamble on finding grants and donations. In the end, on May 17 and 18, 2013, we hosted more than one hundred and forty pen-making enthusiasts for a fun-filled weekend.

Our first stoke of luck came with the donation of space at Woodcraft of Richmond. The store has two large



Scrimshaw pens in the instant gallery.



Ed Brown demonstrates production penturning.

classrooms, one we could use for demonstrations and the other for vendors. Not long after, the local Richmond AAW chapter donated \$500.

Leaving no stone unturned, I contacted AAW Board member and fellow penturner Kurt Hertzog. He recommended, among other ideas, we apply for an AAW Educational Opportunity Grant. Although the determination would not be made until close to the event, we felt our story was compelling enough to take the risk. We were right: A big thank-you to all the staff and AAW members who support this program. No longer worried about the cost of space, AV equipment, chair rental, registration materials, web hosting, and a few scholarships, we set our sights on delivering high-quality demonstrations and bringing in specialty vendors.

The gathering started Friday evening with informal socializing and snacks



Judging the contests.



Curtis Seebeck from Texas demonstrates stabilizing with his Cactus Juice.

for travelers from fourteen states. Many of the attendees were members of the largest Internet pen-making forum, IAP (International Association of Penturners), and previously only knew each other by screen names. Vendors from Texas, Wisconsin, Georgia, and Maryland started selling their wares. An instant gallery took shape in the center of their room.

Demonstrations ran consecutively from 10:00 to 5:00 on Saturday to standing-room-only crowds. These included production pen turning, wood stabilizing, calligraphy, casting colored resins, making millefiori polymer clay blanks, four finishing techniques, and how to customize pens.

Between the demonstrations, donated door prizes worth more than \$3000 were given away in random drawings, pen and blank swaps took place, and the winners of three contests were selected. In every sense, the event delivered on the stated purposes of the EOG, freely sharing knowledge to enrich the woodturning community while creating long-lasting relationships. For more information and pictures of the event, visit midatlanticpen.com.

Photos by Charley Goodwin

—Bruce Robbins



Phil Duffy demonstrates Woodturner's Finish.



Audio/Visual System for Local Chapters An EOG Story Mike Chalifoux

Trying to see exactly what a demonstrator is doing can be difficult. When I was a volunteer videographer at an AAW symposium, I realized how informative it was to be only a few feet from the demonstrator—it was the best seat in the room! Technology has progressed so much recently that making a simple, low-cost audio/video system is possible. And that is precisely what we looked forward to adding to our chapter with the help of our Educational Opportunity Grant!

Putting a web camera on a laptop and adding a projector is not hard to do, but that is not necessarily a system that will allow club members to get the most out of viewing demonstrations. The following sections include several details that may help if you decide to build your own system.

When watching a demonstrator turn, there are two primary viewing points: (1) looking down at the head-stock/toolrest, and (2) looking along the tailstock. Two cameras are needed, as well as the ability to switch between them. We want to be able to hear the demonstrator talk while wearing a faceshield. That requires a lightweight microphone, preferably wireless.

Our other requirements included: ability to record demonstrations, a projector bright enough to see the image in a lit room, and a transportable system.

Computer

A computer and projector are the most expensive items, each about \$400. Our computer is a laptop for transportability.

Potential glitch #1: What type and how many ports are needed (video output and USB)? The projector I chose has VGA and USB ports, no HDMI. I wanted the option of mounting the projector on the ceiling—using a long USB cable is not a good idea—so I made

sure the computer had a VGA output.

Three USB ports are needed: one for each camera and one for a wireless headset. Almost all laptops today should be fine. Make sure to get a computer/projector combination that has compatible cables.

Projector

I used the Epson VS320. The resolution is 1024 × 768 resolution (better than a DVD), has 2700 lumens (bright enough), only weighs 4 lbs, and—

potential glitch #2—can be turned off immediately—no cool off needed. Some projectors have to be left on until the bulb cools off, otherwise they self-destruct. I did not want someone to accidentally pull the plug and destroy the bulb. This projector has a VGA connector.

Cameras

I used a Logitech C525 web cam. This inexpensive web cam has autofocusing, 1280 × 720 resolution. *Potential glitch #3*: It has no mounting hardware, just a clip to rest on the top of a laptop screen. I made a mounting block to screw into the clip with a threaded insert. For camera mounts, I did some simple machining: drilling and tapping holes.

The cameras are lightweight, so a lightweight tripod will work. To position one camera well above the turner, looking down, a boom to extend out is needed. *Glitch #4:* Conduit is too heavy. Tool extenders for washing windows, lightweight and extendable, worked fine, and I made an adapter to attach



An overhead camera allows viewers to easily see the demonstrator's tool cutting the wood.

the extender to the tripod. At the end of the tool extender I mounted a bolt to match the thread on the insert in the camera block. Finally, I added a ball joint so I can twist the camera to any position. I used a Panavise deluxe cctv camera mount, model 845-2246, and was pleased. I did have to drill out and tap one end 3%" × 13.

The tripods worked, but they are clumsy, especially crowded around a small lathe. We use a mini for most of our demonstrations and find that a large magnet (95 lb. pull) and microphone gooseneck made a satisfactory mount for the headstock camera. We still use the tripod for the tailstock. On a larger lathe, we will probably use the tripods for both.

Potential glitch #5: Audio equipment threads are different from what you find in a hardware store. I got adapters from the store where I got the goosenecks from that have the audio thread on one end and a more easily found 3%" × 13 at the other. In the future, we may drill a hole in the lathe to take the goosenecks.

Screen

We have the ability to project onto a wall, and in our newest meeting area, we were allowed to mount a screen on a wall. The projector is bright enough that a silver screen is unnecessary—I made the screen from blackout cloth. Here is a link that does a great job of explaining how this is done: carlofet.com/build-your-own-projector-screen/.

Audio and speakers

Potential glitch #6: Our wireless headset had a slight delay, maybe a quarter of a second, but it was enough to drive demonstrators to distraction. We found a suitable wireless microphone system (PDWM96) and headset (PMHMS20) made by Pyle. It uses older technology (FM) and may get some interference, but it has worked fine for us. They are less than \$20.

The output of the wireless mike goes into the auxiliary input of the speakers. The output also goes to the computer so the audio can be recorded.

I used computer speakers that have good fidelity. Get at least 70 watts. (Big bass speakers are not good for speech frequencies.)

Cables and travel bag

For power for the computer, the projector, audio amplifier, and light, buy a good-quality extension cord and a power strip. For each camera, buy ten feet of extension USB cables. And, because we mount the camera on the ceiling, we have a 50' VGA cable. Make sure you check the gender on the connectors before ordering them.

To pack the system after use, a bag designed for baseball bats works well. It is a duffle bag on wheels with an extending handle.

Software

We needed to be able to switch between cameras, put a full screen on the projector, and record the event. When you set up the computer, install an antivirus program. I used Avast, which is free for noncommercial use. I also installed PowerPoint for presentations.

Once this computer is set up, it is solely dedicated to the audio/visual system: Do *not* update it or use it on the Internet. Make a full backup to DVDs.

There are two components to the video software: a video switch and a recorder.

I found a freeware product, VH Multicam Studio, which supports up to nine cameras. It attaches to another program, VH Capture, which provides the recording capability. It is a shareware program—the author of both is Vladimir Hmelyoff.

You will need to install the drivers for the webcams. When you launch the Multicam software, you will need to add the cameras and associate them with a button on the screen. You will also have to select a resolution (1280×720) to get the largest screen possible. You may have to resize a screen by clicking it and pulling on a corner. On the tools

menu, set the output to go to VH Multicam video capture device.

Launch VH Capture. The video capture source is VH Multicam, the audio capture source is line-in. Give it a file name for your recording and press the button.

When everything is set up and your projector is on, set the computer to extend the screen to the projector. I tell it to have the projector "above" my laptop monitor. I move the screen with the picture up to the monitor, but not completely. I leave the buttons on the laptop screen. I click a button and that picture is on the screen and being recorded.

This is still a work in progress. We have a new meeting place, but the system is flexible and working well. Now everyone can see what our demonstrators are doing!

Mike Chalifoux is a past president of the Association of Revolutionary Turners in Lexington, MA. He is happily retired and can be reached at mike.chalifoux@amail.com.





The overhead camera projects onto the computer screen, as well as onto the wall screen.



A travel bag for the AV system is essential for clubs that do not have a dedicated meeting space.



Turning Tools for Haiti

Early in 2013, I was invited to visit the rural community of Cange, Haiti, to teach a few local artisans the craft of woodturning. I was based at a mission that operates as an art center, which provides jobs for local residents. Classes there include needlecrafts, painting, pottery, and carving, and the art center sells the handmade items to tourists.

The young students are highly motivated and artistically talented, but none had seen a lathe prior to unpacking the shipping carton that contained the lathe they were to use.

During my first demonstration, the students were amazed as a rough piece of wood evolved into beads and coves. By the end of my three-week visit, they were turning their own beads and coves onto bowls, goblets, and boxes.

I had seven students, and with only one lathe and a basic set of turning tools and attachments, everyone shared lathe time. Most would stay until early evening, six days a week, to learn as much as they could while I was with them.

Woodturning tools and supplies are either nonexistent or scarce in Haiti, so I appealed to the AAW for help. I want to express my sincere appreciation to the AAW staff for establishing a toolsfor-Haiti collection point at the Tampa symposium, and also to the many woodturners who generously contributed tools and supplies. A sizeable shipment of donated tools went to Haiti shortly after the symposium in June.

-Billy Griffin



Students proudly display the turned items they made.



A Haitian student learns how to turn.



The quality of the turned items was quite good.

Indiana, Kentucky, Illinois Woodturners Display

The IKI (Indiana, Kentucky, Illinois) Woodturners recently displayed turnings at the Oaklyn Branch of the Evansville Vanderburgh Library in Evansville, Indiana. The display contained a wide range of complexity to solicit interest in the craft of woodturning. The marketing and



community-relations specialist for the library did an outstanding job of printing labels, which included turners' names.

The club's biography, also on display, explained the primary purpose of IKI Woodturners: to promote the craft of woodturning

and to nurture goodwill and camaraderie among wood-turners and prospective woodturners throughout the region. Check us out at ikiwoodturners.blogspot.com.

-Roger Domina

Corridor Wood Turners Empty Bowl Project

Last spring, Corridor Wood Turners, an AAW local chapter, put out a call to its members to contribute bowls for an Empty Bowls Project. This was the third year our club participated in the project. Jim and Glenda Irvin received sixty-one bowls that they displayed for sale at the Marion Iowa Arts Festival. Forty-one sold for a total of \$1,020.

David Kesler, Treasurer,Corridor Wood Turners, Illinois



Calendar of Events December issue deadline: October 15

Send information to editorscarpino@gmail.com

Arizona

June 13–15, AAW international symposium, Phoenix. For more information, visit woodturner.org.

Florida

January 31–February 2, Florida
Woodturning Symposium, Lake Yale
Baptist Convention Center. Demonstrators
include Bonnie Klein, Keith Larrett, Ashley
Harwood, Rudolph Lopez, Mike Mahoney,
Jim Smith, Michael Gibson, Cynthia
Gibson, and Gene Gross. Workshop leaders
are Dixie Biggs, Charlie Shrum, Nick
Dimona, Don Geiger, and Ted Smith. For
more information, visit
floridawoodturningsymposium.com.

Idaho

February 22–23, Idaho Artistry in Wood Show, Boise Hotel and Conference Center. Competitors from all skill levels display a variety of woodworking items. The show features demonstrations, vendors, raffles, auction, and banquet. For information, entry forms, and discount coupons, visit idahoartistryinwood.org.

Illinois

November 2, Mini Symposium in Champaign. Members of three clubs will demonstrate woodturning for other members to watch: Flatland Woodturners, Central Illinois Woodturners, and Lincoln Land Woodturners. Contact Jerry Rhoads, jract1@yahoo.com.

Minnesota

Through December 29, "Currents," AAW's annual themed exhibit, Gallery of Wood Art, Saint Paul. To view the exhibit online, visit galleryofwoodart.org.

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

Pennsylvania

Through October 21, "Everyday Objects Exhibit," which includes objects featured in Stephen Hogbin's recently published book, *Hogbin on Woodturning*, The Center for Art in Wood, Philadelphia. For more information, visit centerforartinwood.org.

October 25–January 18, "Shadow of the Turning: The Art of Binh Pho," The Center for Art in Wood, Philadelphia. For more information, visit centerforartinwood.org.

Tennessee

January 31–February 1, 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.

> **David Ellsworth,** Line Ascending, 2013, Black ash burl, 61" × 12" (155cm × 30cm) ellsworthstudios.com.

October 20-November 16, "Wendy & David Ellsworth," Jenkins Arboretum & Gardens, Devon, Pennsylvania, jenkinsarboretum.org.

Utah

May 15–17, 35th Annual Utah Woodturning Symposium, Utah Valley University campus, Events Center, Orem. This year's theme will be "A Tribute to Dale Nish." Demonstrators include: Kip Christensen, Hans Weissflog, Jakob Weissflog, Art Majerus, Ray Key, Mike Mahoney, Steve Gray, Stuart Mortimer, Bonnie Klein, Kirk DeHeer, Bill Ooms, Nelson Cassinger, Al Stirt, David Ellsworth, Kurt Hertzog, Jerry Kermode, Glenn Lucas, Don Russell, Tom Sorenson, Keith Tompkins, Richard Raffan, Rex Burningham, Joe Wagner, and more. Additional information is available at utahwoodturning.com.





Color-coding abrasives



I cut 1"-, 2"- and 3"- (25mm, 50mm, 75mm-) diameter discs from rolls of abrasives using a laser, which leaves little waste from the roll stock. Unfortunately, the printed grit marking does not end up on the back of every disc.

I decided to color code the cut discs with felt-tip markers using the resistor color code as a model. This was a tedious procedure, but I am now able to keep the discs separated by grit. Note to self: Mark the rolls before cutting the discs out!

This coding really paid off when I spilled a storage container of discs onto my shop floor. It was much easier to get the discs back in their correct bins than if they had been printed with a grit marking.

—Bob Gerenser, California

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

Calibrating lathe speed dial

For woodturners like me who have a lathe without a speed read-out, you can calibrate your speed control with the help of a friend who flies radio-control airplanes. The optical tachometers commonly used in the RC hobby count the number of propeller blade passes.

To simulate a two-blade propeller, I attached a white piece of paper to my 6" (15cm) faceplate and drew a ½"- (13mm-) wide black stripe across the diameter with a marker. I turned on the lathe and measured the speed at various speed-control positions. I made speed labels on my PC and positioned them at the measurement points and now I have an idea of speeds.

My tachometer is designed to work in sunlight. My shop is lit with fluorescent lights, so while measuring, I needed to light the area with a three-cell flashlight. You may want to plan ahead and have one handy, but whether or not you need it will depend on the tachometer you use.

-Kevin Gustafson, Michigan





Clip for toolrest

When hollowing natural-edge vases, it can be hard to keep a captured rig at the same angle when close to the natural edge. I use a large clip attached to the toolrest to keep the hollowing tool from slipping to the left, through an opening, which could make the opening uneven or break the rim of the vase.

—Dick Hines, Virginia



Handwheel

While trying my new Maxi lathe, I realized that the handwheel feature on the headstock was very practical, so I added one to my old lathe.

I made a ½"- (13mm-) thick disk out of MDF and used a router and trammel to duplicate the $3\frac{1}{4}$ "- (83mm-) diameter disk from my Maxi lathe.



Using a Forstner bit, I drilled a 34" (19mm) center through-hole and a 38" (22mm) step-hole to suit my lathe.

After rounding over the sharp edges with a router, I installed the new handwheel with a left-hand nut. I cannot imagine now how I got along without a handwheel.

-Serge Duclos, Canada

Turning smock

If you don't want to buy a turner's smock, wear your usual woodworker's apron inside out and close to your neck. Chips will be kept away from your clothing and from the apron pockets. And if you can, wear short sleeves.

Also, an old short-sleeved shirt, worn backwards (buttoned part way down the back), works well to keep shavings off clothing and is cool in the summertime.

-Serge Duclos, Canada





Tailstock center shield

To prevent injuries to my right elbow or arm while turning, I know I must remove the live center from the tailstock or remove the tailstock completely from my midi lathe when I am finished using tailstock support. But, sometimes I work too fast or even feel lazy.

For safety, I devised a bumper (or shield) that would stand in front of the sharp tip of the live center. I wanted the shield to be quick and easy to install, so I designed it with rare-earth magnets. It will stay put even with vibrations from the lathe.

I used cups to set the magnets in, but you could use epoxy to permanently attach the magnets. I inset the magnets diagonally so the bumper could be used on either of its sides. I also smoothed all edges using a chamfering bit in my router table. For optimum strength, the upright is glued and screwed in a dado milled in the base.

-Serge Duclos, Canada









Compact tool storage

My larger lathe sits in the middle of my shop, so I don't have a wall to hang my turning tools on. I built a portable spinning tool storage that I set onto my workbench next to my lathe.

I used one 6" (15cm) lazy Susan hardware, eight tomato-paste cans, eight 3/8" (10mm) rare-earth magnets and mating cups (from Lee Valley), and one 15"- (38cm-) long by 3"-(75mm-) diameter PVC pipe and a mating cap. I screwed the cans to an 8"- (20cm-) square base and the rare-earth cups are bolted to the PVC pipe with small bolts and nuts that fit into countersunk cups. I added a 5/16"-(8mm-) thick filler block under each cup to compensate for the diameter of the tool handles. Into each can, I dropped a slice of plumbing-pipe foam-insulation pad to protect the tool handles when I drop them into their nest.

Eight turning tools are close to my lathe and take up only 8" (20cm) square of space in my small workshop.

—Serge Duclos, Canada









Tripod log holders

I use tripods to assist in sealing log ends. Sealing the endgrain retards drying for more uniform shrinkage. I usually use Anchorseal, but have also used surplus latex paint and melted canning wax. Homebrew recipes are available.

I get uniform, thick coverage by coating the log ends while the cut surfaces are horizontal. The tripods support the first-coated end to achieve overall coating in a single session. Thus, there is only one cycle of melting the wax or cleaning the brush, and only one day to finish a batch of logs.

I cut strips of cellular extruded plastic sheet—*Coroplast* in the U.S. and *Corflute* in Australia. The strips are about 2" (5cm) high in the direction of the cells. The length depends on the log's diameter, but usually two or three times that diameter.

For hooking the strips together to form a triangle, I cut notches about two cells wide at each end of the strip.

I insert wood screws in three places (the triangle is strongest near the folds). The screws help strengthen the cell walls and stick up about ½" (13mm) above the height of the strip.

Cellular plastic is often used for signmaking, and at the end of political



campaigns there is a glut of discarded signs destined for a landfill. I harvest them as roadside orphans or as gifts from candidates. Corrugated cardboard also works, but it is less durable.

I use variations of these when spraying multiple coats on finished pieces. For that, I sharpen the screws to a needle point for practically invisible footprints.

—Joe Greiner, Florida



Clean Minor Wounds

Jim Andersen

In March while I was turning, my finger got caught between the ways and the headstock and I cut my finger. The cut was small and seemed like no big deal. I waited for the bleeding to stop, washed my hands, applied a bandage, and resumed normal activities.

About a week later—even though the cut was healed and seemed fine—my finger started to hurt. By noon that day, it hurt more and was starting to swell. I applied antibiotic cream, and thought, "If it's not better by Monday, I should get it checked."

My finger continued to swell and by suppertime, it was affecting my whole hand; I could not curl my fingers and was in pain. Deciding not to wait until Monday, I headed to the urgent care center. I thought they would give me antibiotics and send me home, or at the worst lance and drain my finger and send me home with antibiotics.

The nurse wanted the orthopedic doctor to take a look; he said I had an infection. At first he said to watch it and come back tomorrow. I told him it was getting worse by the minute and I didn't think I could make it until tomorrow. The doctor was concerned about surgery because I had just eaten and it's not a good idea to have general anesthesia within six hours of eating.

After talking to an anesthesiologist, the doctor said they would do a block rather than general anesthesia, but I might have to stay in the hospital for three days. That took me by surprise: How could a little cut on my finger put me in the hospital?

Surgery

By 9:00 p.m. I was in surgery. They did a zigzag incision on the middle finger of my left hand from the joint closest to the tip of my finger to where the finger meets the hand. They cleaned out the infection,

which had gotten to my tendon, put a drain tube in, and sewed it up.

I had to stay in the hospital with IV antibiotics until Monday. The doctor had taken a culture sample to determine the strain of infection to know how to further treat it. If we were lucky, it would be a common strain and could be treated with antibiotic pills; if not common, I would be sent home with IV antibiotics, for as long as two weeks.

Fortunately, mine was a common staph infection and could be treated with pills. I came home about noon. A week later, the stitches were removed, but it took a while before I could resume turning.

Safety precaution

Of course we do not need to run to the urgent care center every time we see blood, but there are precautions one must take, even with the smallest of injuries. I am not a doctor, so you might want to talk to your physician, but at a minimum, cuts should be washed thoroughly, not just with soap and water, but also with hydrogen peroxide. Keep the cut covered to keep it clean and continue to wash it out as it heals.

My doctor recommended using hydrogen peroxide initially, cleaning it twice a day using Dial antibacterial hand wash, and then applying Bacitracin until the cut is fully healed. Additionally, the deeper the cut, the more likely an infection can occur, so if you think you might need stitches, have the cut checked—at the very least, it will get properly cleaned.

Fortunately, my wound was treated early enough that there should be no lasting effects. If not, however, I could have ended up with tendon damage, which would permanently limit the use of that finger.

Minor cuts can become a major problem if untreated, so do not ignore them. Clean them and keep them clean. If there is swelling, get it checked right away, even if it looks okay on the outside. Stay current with tetanus vaccinations. A small cut could end up costing thousands of dollars to treat and three to four weeks of time away from the shop.

Jim Andersen is a member of the Wisconsin Valley Woodturners in Wausau, Wisconsin.

Local Chapter Benefits

The AAW is committed to supporting our more than 305 local chapters. Here are the benefits of being a local AAW chapter:

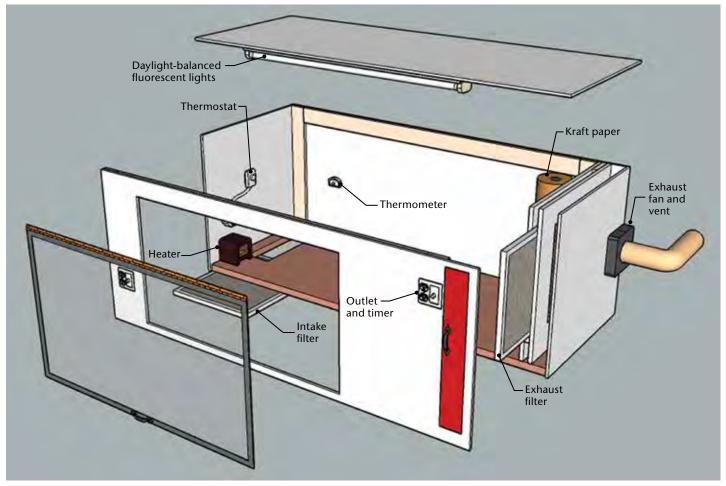
- Access to AAW-negotiated insurance policies for club-sponsored woodturning activities for AAW/local chapter members.
- Eligibility to nominate chapter members to participate in the 2013 Arrowmont and John C. Campbell scholarship programs.
- Email notifications of your regional symposiums sent to AAW members in your area.
- Eligibility to apply for Educational Opportunity Grants.
- Local chapter profile listed on the AAW website.
- Participation in and access to "Chapter Best Practices" and new teaching tools for 2014 on AAW's website.
- Local chapter website linked with the AAW website.
- Access to the resources in the AAW Turners' Program for chapters working with youth.
- Chapter Challenge Competition at the national symposium.
- AAW-sponsored chapter meeting at the national symposium.

Want to know more or have a suggestion on how the AAW can better serve local chapters? Call toll free at 877-595-9094 or email Linda Ferber at linda@woodturner.org.

Think Inside the Box

A dust-free finish booth that also works as a drying box for green wood and a stage for photography

John Franklin



A simple box with many features: ultrafine intake and exhaust filters, an exhaust fan, and multiple electrical outlets make for a versatile booth.

f you are like me, you work in a small, unheated shop. When you want to finish a piece, you have to put all other projects on hold to avoid getting dust in the wet finish. You sometimes try to heat the shop to make finishes cure faster. When you think you have everything right, you may still get complaints about finish odors that make their way to living quarters. To solve those problems in my shop, I built a multipurpose booth.

This large, enclosed box serves mainly as a dust-free finish-drying booth. It is vented to the outdoors, so heat, humidity, and fumes from finishes exit the building. When closed, the booth is energy-efficient. I can regulate the interior temperature and humidity, so I can work in cold weather without heating the entire shop. What's more, the finish and the wood start at the same temperature, for optimum results. Best of all, because the booth has a door and a

filtered air intake, I don't have to stop sanding or turning while the finish dries. The booth also makes an outstanding place to store and dry green or partially turned pieces. And, it serves as a photography booth.

How it is made

I spent about a year building the booth, making numerous modifications along the way. At the outset, I had a bench top made from an $80" \times 30"$ (203cm



Built around a solid-core door, the booth works well for finishing, drying, and photography.



With the addition of photographic background paper, the booth makes a good set for photography.

 \times 76cm) flush interior solid core door, resting on a set of base cabinets. The door became the floor of the booth. The sides, back, and top are ½" (13mm) plywood, strengthened at the corners with 1" \times 4" (25mm \times 10cm) pine boards. Overall, the booth is 81" long, 30" deep, and 31" high (206cm \times 76cm \times 79cm). I can use the space above and below the booth for additional storage. I need a booth this size because I make wood sculptures that are at least 4' (1.2m) long. However, you can easily alter the dimensions to suit your needs and the space available.

A pair of standard-size furnace filters handles all entering and exiting air. One 20" \times 25" (51cm \times 6.4cm) filter, below the floor on the left side of the booth, cleans all incoming air. A 20" × 20" (51cm) filter on the right side traps airborne dust before it exhausts through the vent. A small sealed induction vent fan draws air left to right through the booth and out through a 4" (10cm) PVC duct to the outdoors. I use 3M Filtrete filters with the 1900 micro-particle performance rating. These are designed to filter particles as small as 0.3 micron. Do not use cheap furnace filters; you want the fine filtration.

I have about a 6' (1.8m) run of duct from the booth to an outside wall. Your shop layout and location will dictate the venting your booth will need.

The door and lighting

The door is a 48" \times 28" (122cm \times 71cm) piece of Lexan framed with standard

aluminum molding, available at glasssupply stores. A piano hinge holds it in place, and 1" (25mm) foam weather stripping seals the opening.

At first, I used a 6' (1.8m) piece of acrylic for the door, but it was brittle and broke after a few weeks. When I went to replace it with Lexan, all I could find was a 48" (1.2m) piece, so I changed the size of the door opening. The small window you see in the photos is a leftover from the larger opening. It is handy but not necessary. To hold the door open, I slip the handle over a small wire hook attached to the ceiling.

For lighting, I mounted two twin 48" fluorescent fixtures in the top, just behind the door hinge. I use daylight 6400k lamps for accurate color perception. The bright lights are positioned to make it easy to notice runs, drips, or dust so I can correct those problems before the finish dries.

Wiring

The booth plugs into the house wiring, so it can be disconnected at will. On the

left end, I can position a small Pelonis ceramic disk heater connected to a line-voltage thermostat to maintain a constant temperature in the booth. I can operate the heater two ways: with an external outlet connected to a one-hour timer to preheat incoming air or on a thermostat inside the box. I added a second, untimed electrical outlet inside the booth to power accessories like additional lighting.

The heater is expensive, but it holds up well and the ceramic disks do not get as hot as units with wire heating elements. That makes it safer anywhere in my shop. It also has an integral thermostat that shuts it off by itself if necessary.

I have a min/max thermometer mounted on the back wall. It shows the range of temperature levels, so I know what the booth temperature has been for any period of time. A humidity gauge helps when I use the box to dry partially turned pieces.

The timers for the heater and fan and their outlets are mounted on the outside of the box. This make the unit >



A line-voltage thermostat on the sidewall controls a heater outlet. A min/max thermometer is mounted on the back wall.



The intake filter slides into a slot at the bottom of the box. I can place a heater below the filter or inside the booth.

practical because you can turn the heater or fan on or off without opening the door of the box.

I often use a lot of West Epoxy, Enviro-tex, and Crystal Coat polyester finishes. My booth makes it possible to get the finish and the wood to the same temperature, which helps avoid out-gassing bubbles when applying warm finish to cold wood.

To keep inside surfaces clean, I store a large roll of brown wrapping paper mounted on a small lazy Susan base in the box. I can easily pull off a clean piece of paper for the floor to collect runs and drips.

How it works

I usually pre-dry small to medium-sized bowls in a microwave oven, then set them in the box to dry further. I put them on small risers for good air circulation, rotating the pieces often. To save energy, I only turn on the vent fan for five to ten minutes every once in a while when the humidity is high. Running the fan constantly wastes power and may dry the wood too quickly, causing it to crack. I am always drying unfinished

I keep a roll of brown paper inside the booth on a lazy Susan, unrolling pieces as needed to catch drips.

pieces, often alongside ones with finish drying; I have to be careful not to let dust and debris from unfinished pieces get in the finish.

I use the heater only when I am drying wood or preheating wood and finish before application, never when I apply a finish or even shortly afterward. Running a heater inside any box while spraying risks an explosion. On a more practical level, running a heater inside the box when (or after) applying finish is simply foolish because the wood will rise in temperature and that could cause undesirable out-gassing bubbles to form in the finish.

If my shop is cold and I need to preheat the incoming air while a finish is drying, I move the heater under the box and run it on the timer so it preheats the air under the filter. Running the exhaust vent at the same time draws the warm air into the box. Carefully monitor the temperature on the inside thermostat to make sure it does not rise before the finish has cured. Both the heater and the fan can only run up to an hour before the timers shut off. If necessary, re-set the timers, but you never need to run either continuously.



The red door allows access to the exhaust filter. The outlet and timer control the vent fan. The window is a leftover from an early, larger acrylic door.

The fluorescent lights, combined with additional outside lighting on the sides, make the unit a reasonable photo booth. I roll a sheet of neutral-gray photographic paper down the back and across the floor of the cabinet.

What it is not

This booth was not intended or designed to be a commercial spray booth. It cannot be redesigned for use as a flammable-finish spray booth without making it useless for its other functions. If you need a spray booth, it is best to build one from scratch.

If you were to build a separate booth for spraying finishes, you must use an explosion-proof fan designed for use with combustible fumes. This type of fan costs \$150 to \$600, depending on the size. I bought the smallest unit I could find because I do not need to move a large volume of air. A big fan suitable for volume spraying will not work well for drying wood.

In addition to using an explosion-proof fan, isolate the lighting and all electrical contact points by mounting them outside the box. Most electrical supply houses sell explosion-proof hospital-rated switches and outlets, but be prepared to spend \$40 for a switch.

All things considered, this project was a home run, saving me much exasperation. I wish I had built it twenty years ago. My ability to continue turning while things are drying is a huge benefit in time. This is especially true when I use epoxies that need several days to cure in a dust-free environment. This booth serves its three functions well. Each of those functions could be accomplished better with separate booths, but I do not have the space.

John Franklin, from Kingston, New York, is an AAW member and president of the local KWA-Kaatskill Woodturning chapter in the mid-Hudson area. He has done numerous demonstrations for the Kaatskill group and for the Adirondack Woodturners. He has also demonstrated at the Totally Turning Symposium in Saratoga.



Ornaments FROM A TUBE KIT

Joshua Friend

his simple project is sure to please during the holidays: ornaments from a tube kit. There are many projects that make use of brass tubes for centering and driving the wood on the lathe, such as pens, whistles, letter openers, and perfume atomizers. If you have not yet ventured into the world of tube kits, this project is a good place to start. It's simple, quick, and fun!

There are several resources for purchasing ornament kits. I bought mine from Craft Supplies USA. When you purchase an ornament kit, it comes with a brass tube, a decorative tip (in the shape

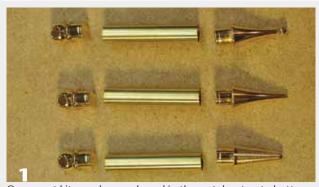
of a droplet, icicle, or spiral), and an eye cap for hanging the ornament (*Photo 1*). You will also need a pen mandrel, which is used for holding and driving the piece on the lathe, and two bushings, which make it easy to achieve a smooth transition from the wood to the metal parts (*Photo 2*). When ordering, make sure to purchase the 7 mm (.335") bushings, the appropriate size for this kit. You will also need a 7 mm drill bit.

Wood preparation

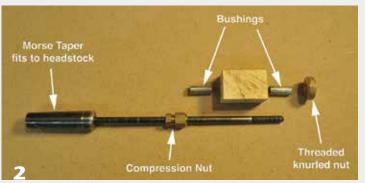
This project does not require much wood, so it is ideal for using up small

scraps or pieces of exotic wood or burl. The brass tube provided in the kit determines the length of the blank: The wood should be cut about ¼" (6mm) longer than the brass tube. Place the brass tube on the wood and make a cut mark so that about ½" (3mm) overhangs each end (*Photo 3*). It is not essential to cut the wood square because the blank will be squared up later using a barrel trimmer. The width of the blank depends on your design.

Drill a hole all the way through the blank using a 7-mm drill bit. Center the hole, but precision is not ▶



Ornament kits can be purchased in three styles, top to bottom: droplet, icicle, spiral.



A typical pen mandrel can be used to turn many different tube-type kits. The bushings go on both sides of the wood and provide a target diameter for a smooth wood-to-kit transition when the kit is assembled.



Cut the wood about ¼" longer than the brass tube, allowing for ⅓" of wood beyond each end of the tube.



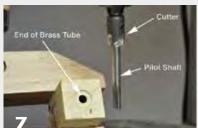
Drill a 7 mm hole through the wood. A wooden clamp will suffice to hold the piece, but specialized pen-drilling vises are available.



Lightly sand the brass tube before gluing it into the wood.



Spread the glue evenly on the brass tube and make sure the tube is below the wood's surface on both ends.



A barrel trimmer makes quick work of trimming the wood flush and square with the brass tube.

absolutely necessary because the blank will become centered when it is turned (*Photo 4*).

Prior to gluing the brass tube into the wood, gently rough up the surface of the tube using a fine abrasive, which will improve adhesion of metal to wood. I usually make multiples of these kits, so to make the process efficient, I insert a flap sander into my drill press and apply the tube to it, wearing gloves, of course (*Photo 5*). Hand sanding with a small piece of 220-grit abrasive will also do the trick.

Glue the tube into the wood so that the tube is slightly recessed on both ends. Several types of glue can be used, but my favorite is two-part epoxy, which provides plenty of working time and a strong bond. Another type of adhesive that would give similar benefits is polyurethane glue. If you are in a hurry, use CA glue, but beware of its quick setting time: If you don't position the tube quickly, it could end up glued into the wrong place. If this happens, additional tubes can be purchased separately.

Apply glue directly to the brass tube and work the tube into the hole, twisting it in and out to spread the glue evenly (*Photo 6*). You can purchase an insertion tool designed for helping push the tube inside the wood and into the proper position, but I find it sufficient to use the end of a pencil or other pointed object such as a scratch awl.

The tube is set inside the wood because, after the glue cures, the wood will be trimmed down flush and square with the tube. This must be done prior to turning the project on the lathe so that later, when the ornament's brass fittings are pressed into the tube, the wood will be square and you will have a good union from wood to metal (no gaps).

There are various methods of trimming the wood flush with the tube, but I like to use a barrel trimmer

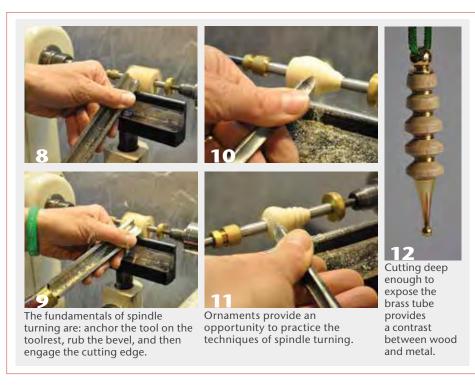
because it is simple, easy, and consistent. The pilot shaft of the barrel trimmer goes inside the brass tube and aligns the cutter head square to it. Make sure to cut down far enough so that the brass tube is freshly exposed. It is okay to trim a little bit off the end of the brass tube because that will ensure the wood and tube are flush and square with the length of the tube itself (*Photo 7*). Do this on both ends of the workpiece.

Mounting and turning

Now you are ready to take the project to the lathe. Mount the Morse taper of the mandrel into the lathe's headstock. Refer to Photo 2, which shows the order in which the pieces must go onto the mandrel. Most mandrels come with a compression nut or locking collar so you can adjust the position of your workpiece on the mandrel. It should be positioned far enough to the end so you can tighten down the knurled nut with moderate pressure. Bring up the tailstock with the point of a live center or a 60° cone and apply light pressure to the end of the mandrel. Too much pressure from the tailstock will result in bending the mandrel and it will not turn true.

This is a good opportunity to work on a variety of spindle-turning skills. Although the project is small, I like to start with a roughing gouge to round the piece to a cylinder. Do this by holding the handle of the gouge down so that you are rubbing the bevel without cutting. Then, slowly and gently lift the handle until the cutting edge is engaged. Point the cutting edge slightly in the direction of the cut and move the tool from center to end (*Photos 8, 9*).

After the piece is round, I use a spindle gouge to turn various details such as beads, coves, ridges, or tapers. In general, all details formed on the lathe fall into the broad



categories of coves, beads, and fillets (flats). Seeing it this way, the outside of a bowl, for example, is part of a large bead, and a taper on a spindle is part of a gradual cove. It's an interesting way to think about forms and design.

These ornament kits allow you to creatively pursue shapes and designs (*Photos 10, 11*). You can even cut all the way down to the brass tube to achieve a contrast between wood and metal (*Photo 12*). But, there is one important consideration: the bushings are the same diameter as the brass fittings on the kit. So, whatever transition you use for the wood to

the bushings is the transition the wood will make to the brass fittings in final assembly.

When you have achieved a design you are happy with, sand the piece (*Photo 13*). Fine details should be sanded with fine abrasive (320 or 400 grit) so that details remain crisp. If you rely on heavy sanding to remove torn wood grain or frayed edges, you will end up with muted details.

Finishing up

Apply your favorite finish, such as a friction polish or wax applied on the lathe. I like to use a sprayed gloss lacquer. To spray

the workpiece without having to touch it, I mount it on a dowel with a small amount of electrical tape on each end to hold it in place, and then I simply hold the dowel and spray (*Photo 14*). Suspend the ends of the dowel on a rack while the finish dries.

The final step is to assemble the kit parts. The decorative tip and end cap are designed for a press fit, which means no glue is needed. There are several means of applying pressure to achieve a press fit, such as a vice or a drill press—both fitted with scrap wood to protect the kit—a clamp, or a pen press designed specifically for this type of application. Press in either the decorative tip or end cap first, but not both at the same time. Apply slow, gentle pressure until the brass of the fitting seats squarely with the wood (Photo 15).

Now you are ready to surprise friends and family with a lovely ornament. Alternatively, these kits can also be used to make decorative pulls for light-fixture chains.

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.



Gently sand with the toolrest out of the way.



A dowel rod makes an easy setup for spray finishing small kit parts.



Scrap wood mounted in a vise will protect the brass fittings while slowly press-fitting pieces together.



ctober is not too early to think about making Christmas ornaments, like these inside-out trees. Using the basic techniques of ring turning described in past articles (vol 16, no 4 and vol 26, no 1 and no 6) and adding a few additional steps, you can turn both the inside and outside of an object and easily make multiples. With a little imagination, you can use the technique to design other styles of ornaments, such as holiday bells.

Make a pattern

Begin by drawing a full-size pattern on paper like the one shown in *Figure 1*.

A thick-tipped marker works well to achieve the width for the outline of the tree. Strike a line of symmetry through the tree, dividing it in half; the two sides of the pattern do not have to be identical. Here, the tree leans a bit and the symmetry is off just enough to give the ornament a handmade character.

Glue the pattern to two pieces of thin wood whose edges are butted together but not glued. Align the line of symmetry with the seam between the two pieces of wood. When the glue is dry, use a sharp knife to cut the paper pattern apart along the seam (*Photo 1*).

Figure 1. Use this as a model for your own tree design.

With a bandsaw or scrollsaw, cut out each half pattern, both inside and outside edges (*Photo 2*). Mark or paint the edges of the wood black.

Prepare two disks

Cut two disks of the wood you want to use for the ornaments. The larger the diameter, the greater the number



Glue the pattern to two thin pieces of wood, then slice down the middle to create half-trees.



Carefully cut out each pattern piece.



Make sure the face of each disk is flat, so they can later be glued together securely.



Screw the two disks together and carefully true up the assembly.

of ornaments you can produce. I used two 9"- (230mm-) diameter pieces for these trees. Each one should be half the thickness of the full-size pattern.

Attach a glue block to one side of each disk. These blocks are tenons for mounting each disk into a scroll chuck. One at a time, mount each disk into the scroll chuck and true up each face to make them flat (*Photo 3*). They will be glued together eventually, so ensure that each surface is flat.

Screw the two disks together using two screws, one on each side. If possible, orient the grain patterns on the disks to give what looks like branches sloping down. Make sure the screws are placed far enough on the inside of the disks, away from where the tree pattern will be turned. The glue blocks will be on the outsides (*Photo 4*).

Using one of the glue-block tenons, mount the assembly into the scroll chuck, using the tailstock center for support. Before tightening the chuck's jaws, ensure that the seam between the disks is perpendicular to the axis of the lathe. Re-center the piece as needed until the seam is aligned properly. Tighten the chuck jaws, and then true up the tailstock-end glue block. True up the disks. Everything should now be in alignment.

Insert the pattern

Take the screwed-together disks to the bandsaw and cut a slot for the patterns (*Photo 5*). You will need to use a board that is thicker than the glueblock tenon to support the disk when cutting the slot.

Remove the screws and separate the two disks. Glue one half of the pattern into each disk, making sure the edges along the symmetry line are flush with the faces of the disks, and that the bottom of the pattern is flush with the outside diameter of the disks (*Photo 6*).

Turn the inside profile

One at a time, mount each disk into a scroll chuck using the glue blocks.

Support the disk with the tailstock. Remove material that represents the inside of the tree pattern until you just touch the painted edge of the pattern (*Photo 7*). I do not sand the trees, but if you want yours smooth, now is the time to sand.

With the inside profiles turned on each disk, glue the disks together where the profiles come together. To ensure a good bond, apply a light coating of wood glue to both disks. Align the disks at the pattern slot and clamp them together. This completes the inside profile of the tree.

Turn the outside profiles

After the glue has set, remount the assembly, using the glue-block tenons, into a scroll chuck and turn the first outside profile. Use the same techniques as for the inside. Sand if you want. When the first side of the tree is complete, flip the assembly end for end and remount it to complete the other side.

The magic

Carefully part away the turned profile ring from the wood left on the inner area of the disk. Use a very slow lathe speed for the finishing cut that separates the tree-profile ring from the solid wood in the middle.

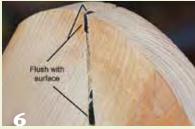
Now it is time to slice the ring into wedges to cut individual trees. Cut the wedges so the tree trunk is between ¼" to ½" (6mm to 12mm) thick, or whatever looks about right to your eye (*Photo 8*). Real trees are thicker near their trunk, so the orientation of the tip of the tree to the inside of the ring results in an appropriately sculpted look.

Voilà! The tree appears like magic. A ring this size will make about forty inside-out trees.

Sand and finish the trees however you want. I happen to like the rough cut surfaces. To that, I apply tung oil or thinned acrylic paint. Happy holidays.



Cut a slot in the disks that will house the two tree-pattern pieces. (Avoid the screws.)



Glue a half-pattern into the slot on each disk. The inside of each pattern should face the outside of the disk, away from the tenon. The trunk of the tree should be on the outside rim of the disk.



Turn the inside tree profile of each disk. The black paint on the pattern warns you when to stop.



With the outside profiles turned and the center of the disk parted off, saw out the trees.

Roger Zimmermann is the president of the Wisconsin Valley Woodturners. A retired engineer, he has been turning for more than thirty-five years. You can email Roger at Latheybum@aol.com.

Lighthouse Ornaments for the Coasts Dennis Belcher



uch of my life has been spent in the Midwest, and when I think of Christmas, I think of cold, snow, and ice. When my wife and I moved to the coast of North Carolina, we left the snow, ice, and cold weather, along with snowmen ornaments, icicle finials, and a multitude of other cold-climate holiday images. The ocean is the driving influence on the North Carolina coast, and it serves as inspiration for much of my work.

Lighthouses are a common symbol of seashores everywhere, and I wanted to turn an ornament fashioned after one. With a bit of research, I settled on the Bodie Island Lighthouse on the Outer Banks of North Carolina as inspiration. The current Bodie Island Lighthouse is the third that has stood on Bodie Island. It was built in 1872 and stands 156' (48m) tall. It is located on the Roanoke Sound side of the first island that is part of the Cape Hatteras National Seashore.

There are eight lighthouses still standing along the coast of North Carolina. Each is painted in a distinctive pattern, allowing ships to easily identify where they are along the coast, as well as warn of dangers. Bodie Island Lighthouse's horizontal paint pattern can easily be duplicated on a lathe, unlike some lighthouse patterns that are diagonal.

The process

Begin the project with wood selection. Unless you intend to paint the whole

ornament, choose a light-colored wood. I typically use hard maple that is free of darker heartwood. Begin with a blank 1" square by 5½" (25mm by 140mm) long.

I prefer to use a chuck for holding this project to make it easy to work on the roof and to drill the hole for the eyehook—I simply move the tailstock out of the way after forming the ornament. My preference is a Talon chuck with step jaws. A second choice would be spigot jaws. In both cases, the blank should make solid contact against all four jaws and extend about 4" to 4½" (100mm to 115mm). If there is any wiggle, turn a 1" (25mm) tenon on the blank with a shoulder for the jaws and remount.

The full width of the 1" blank will be needed at the base of the ornament, so be certain the wood is centered (*Photo 1*). To avoid having your lighthouse end up with one or two sides straight while the others are round, particular care needs to be taken to center the wood in the chuck jaws.

Turn the blank into a cylinder, and mark with a pencil the key dimensions. Use a small ruler or a story stick. My preference is the story stick, which is a shopmade guide with all the critical dimensions marked (*Photo 2*).

I use the point of a skew chisel to scribe the boundaries into the ornament after they have been marked in pencil (*Photo 3*).

Begin to form the body of the lighthouse. Visualize a taper that



Image courtesy of Outer Banks Visitors Bureau, outerbanks.org.

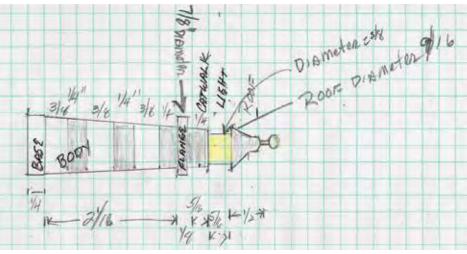


Figure 1. Make a rough sketch, to scale, and then transfer the dimensions to a story stick.

flows from the base, through the flange, and all the way to the upper edge of the catwalk. This taper is critical to achieve the correct look of a lighthouse (Figure 1).

Start by setting the flange. Use a freshly sharpened Bedan or

small parting tool to remove wood halfway to the final diameter and leave the flange a bit wide so the wood can be cleaned up later using a skew chisel (*Photo 4*).

Set the depth of the light area of the lighthouse. Then, begin on the roof

and refine that area until the final dimensions are reached (*Photos 5, 6*). Use the photograph of the Bodie Island Lighthouse as a reference.

Work on the base of the lighthouse. Mark the bottom of the ornament using a parting tool, just to the depth ▶



Use the tailstock with a revolving center to support the wood until the lighthouse is fully turned.



Mark key dimensions using a story stick and pencil.



Scribe boundaries into the wood using a small skew chisel.



Establish the diameter and width of the flange first.



Establish the diameter and width of the light area.



Turn the roof.



Establish the bottom of the lighthouse.



Work on the taper of the body.



Use a round skew chisel to get into tight areas.



Use a skew chisel to clean up the flange.

that it is clearly evident (*Photo 7*). The base is about ¼" (6mm) wide. As with all the measurements, using a critical eye is the important thing—continue referring back to the photo of the original lighthouse.

Work on the taper of the body. I use a small spindle-roughing gouge to form the taper of the body (*Photo 8*). A 3%" (10mm) spindle gouge works as well. If

you are proficient with a skew chisel, finalize the body taper with that to achieve a clean-cut surface.

Extend the taper of the body past the flange to the top edge of the catwalk. A round skew chisel works well to get into the small space (*Photo 9*). When working on a small project like this, I tend to reach for smaller tools. It's not that the project can't be done with

larger tools, but smaller tools are safer and easier to use on small projects.

Clean up the two sides of the flange, if needed (*Photo 10*).

Examine all elements of the lighthouse and finalize the dimensions so the proportions are balanced. The tendency is to make the roof a little larger than that of the actual lighthouse, so you may find that yours needs to be turned smaller.

Sand and prepare to finish

Sand if needed, making sure you move the toolrest out of the way. Generally, I sand with a sequence of 180, 220, and 400. Sanding past this point may create difficulties when applying the ink bands on the body— if the blank is too smooth, the ink from the markers will not adhere to the wood.

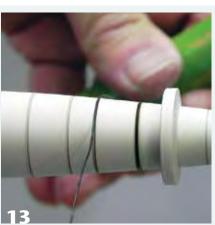
Color can be applied in one of three ways: friction burning, markers, or acrylic paints. Friction burning is the fastest and least involved. Marker coloration gives a deeper black, and yellow can be added to the light portion of the ornament. Painting with acrylics gives the crispest bands and most intense color. It is important to select a method for applying the black bands that is compatible with your finishing sequence so that the bands do not smudge (*Photo 11*).



Smudged bands like these can be avoided.



Use a story stick to establish where the bands will be.



After cutting V grooves, burn the grooves with a wire.

If you color the wrong area, simply turn away the paint and adjust the remaining dimensions accordingly.

Use the markings on your story stick to establish the boundaries of each black band. Marking the story stick with black helps in applying color to the correct areas (*Photo 12*).

Cut a slight V groove with a skew chisel at the boundary of each black band to sharpen the edge between the black bands and the body. Burn the groove with a small wire held in the groove at high speed (*Photo 13*). This creates a crisp edge for each color change.

Paint the ornament

Friction-burned bands

Remove the toolrest and hold a piece of wood against the ornament, within the marked band. Use moderate pressure. A piece of maple works well (*Photo 14*). An increased speed on the lathe helps the process. When the wood smokes, you have finished. Move to the next band.

There are a couple of things that are important to consider at this step. First, if you have sanded the blank too smooth, a proper burned area is harder to create. Second, be sure to turn down the lathe speed following the procedure.

Markers

It is critical that lathe speed be turned down to 500 rpm or lower because at faster speeds, the marker skates on the surface of the wood and does not transfer color well. If you have sanded the blank too smooth, you will also have trouble applying color.

An alternative is to turn off the lathe, hold the marker against the wood with one hand and turn the handwheel with the other hand. A slow lathe and light hand pressure seem to be the secret to success (*Photo 15*).

Acrylic paints

Acrylic paints produce crisp, intense colors. Using a small brush, apply them in the same manner as markers,

with one exception. Lathe speed must be below 25 rpm. At higher speeds you will end up painting a black strip across your shop.

Drill hole and finish

Remove the tailstock and drill the pilot hole for the eyehook. For this, I use a small drill bit, sized to the eyehook and epoxied into a shopmade handle (*Photo 16*). It is easy to crack the wood when screwing in the eyehook, so drill the correct-size hole for the eyehook.

Part off the ornament. Undercut the base slightly to ensure that the lighthouse will stand on its own (*Photo 17*). Remove the small nub, sand the bottom, and insert the eyehook into the top.

Any number of finishes can be used. The objective is to keep the edges of the colored bands crisp, the black remaining on the wood, and not smear color from a black band to the light-colored wood. A few hints:

Lacquer (Deft brand, for instance) or alcohol-based finish will dissolve the ink from markers. The heat generated by most lathe-applied finishes causes friction-generated bands and marker bands to smudge. Acrylic paint needs to be thoroughly dry before any finish is applied, to avoid smudging.

After a number of failures and ruined ornaments from using improper finishes, I recommend Wipe On Poly, gloss. I apply it after the ornament is removed from the lathe.

Final step of the project is to sign the base. Your lighthouse is a unique ornament that can be hung with pride.

Photos are by Carl Ciervo, unless otherwise noted.

Dennis Belcher retired in 2006 from a career in the investment world. He moved to Hampstead, North Carolina, and joined the Wilmington Area Woodturners Association. More of Dennis's work can be seen at seabreezewoodworks.com.



Friction burning adds a dark color to the maple.



Drill the hole for an eyehook.



Use markers (or acrylic paints) to add color.



Part the ornament off the lathe.

A Hot-Air Balloon Ornament Bob Baucom

few years ago, I started turning Christmas ornaments for my friends' grandchildren and the neighborhood children. As the number of requests grew, I needed to find new and different ideas, and came up with hot-air balloon ornaments.

I want my balloon ornaments to be conversation pieces, so I make them look as realistic as possible. I paint them with bright colors to stand out on the tree. They are hollowed so they won't bend the tree limbs. I turn

them from a wide variety of scrap wood. I use Osage orange for the gondola, because it is similar in color to basket material.

Turn the balloon

- Mount a 2" × 2" × 4½" (50mm × 50mm × 114mm) blank between centers. Turn it to a cylinder and make a tenon on one end for chucking.
- Next, mount the cylinder into a scroll chuck and use a spindle gouge to turn the free end down to 3/4"

(19mm) in diameter, forming the bottom of the balloon (*Photo 1*). My balloons are usually a slightly oblong globe pinched into a tapered base or bottom, essentially a large bead (*Photo 2*).

• To hollow the inside, I begin by drilling a hole with a ½" (12mm) Forstner bit, stopping about ¾6" (5mm) from the top (*Photo 3*). I like to use the toe of a ¼" (6mm) round skew chisel to finish the hollowing. (You can also use a series of straight and hooked



small hollowing tools.) I keep the toolrest just above center, placed as close to the work as possible. With the toe of the skew chisel pointing toward the inside left edge of the balloon, I push it into the wood and follow the outside shape as I go (*Photo 4*).

I usually leave the wall about 1/8" (3mm) thick. Since this is an ornament and you want it to hang down, it is okay if the piece is thicker on the bottom.

Leave enough wood at the top of the balloon so you can sand the exterior to 220 grit. After sanding is completed, part the balloon off, clean up any nib, and sand the parted surface (*Photo 5*).

Make the gondola

Turn a cylinder from a piece of Osage orange, ¾" square by 2" long (19mm × 19mm × 50mm). Taper the cylinder toward the headstock. I like to roll small beads at the top and bottom of the gondola (*Photo 6*).

Once you have shaped the gondola, texture the outside to simulate woven straw. Tilt a mini texturing tool at about a 40-degree angle and draw it down the surface between the two beads (*Photo 7*). Repeat, with the tool tilted in the opposite direction. I get the best pattern when my lathe speed is around 500 rpm. Turn the lathe off and see if you are getting a basketweave look (*Photo 8*). If necessary, repeat the texturing and push slightly harder on the tool.

After texturing the gondola, hollow out the inside, lightly sand to 320 grit, and part it off.

Paint the balloon

I want a smooth surface for painting designs and colors, so I give the balloon at least three thin coats of white gesso. After it dries, I push the balloon onto a jam chuck (*Photo 9*),



Begin shaping the balloon with a half-cove on the tailstock end.



Begin hollowing by drilling with a Forstner bit.



The rest of the balloon is essentially a large bead.



I like to use the toe of a small round skew to finish the hollowing.



With the balloon shaped and sanded, part it off.



Use a mini texturing tool to create the illusion of a basket weave.



Roll small beads top and bottom.



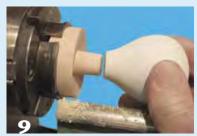
A textured gondola is ready to be attached to the balloon.

set the lathe speed to around 250 to 300 rpm, and sand the surface lightly with 320-grit abrasive. (If my jam chuck is a little loose, I wrap it with a piece of wet paper towel, which makes the wood swell slightly.)

If you want to lay out a pattern of spirals or checks for the painting, do it now, with the balloon on the jam chuck (see Sidebar).

For decorating inspiration, look for balloon images in books, magazines, and on the Internet.

I use acrylic paints because they dry fast, the colors are bright, and they are easy to mix. To keep the colors separated, I mark faint pencil lines on the gesso, then burn pattern lines into the wood. (I purposely darkened the pencil lines in the photos to make them easier to see.) >



Make a jam chuck to hold the balloon while you paint it.



Glue short pieces of cord evenly around the gondola.



A drop of cyanoacrylate is all you need to attach the cords.



The finished ornament, ready to hang on the tree.

Laying out spirals on the balloon's surface

One of my favorite color patterns for balloons is a rainbow of spirals. That's easy to do if your lathe has an indexing wheel. For example, mine has 48 holes, so I use every eighth hole to mark lines for six spirals, or every sixth hole for eight spirals.

Mark one indexing hole as the starting or "0" hole (*Photo 13*). Lock the wheel and set the toolrest at center. Use the rest to support the pencil as you mark the first line. Count off the appropriate number of holes for the second line, reset the wheel, and make the mark. Keep going until you have come full circle (*Photo 14*).

Next, mark horizontal lines. Make sure the indexing wheel is unlocked. Run the lathe at about 500 rpm and make a pencil line $\frac{1}{4}$ " (6mm) from the top of the balloon. Make four more lines, spaced about $\frac{1}{2}$ " (12mm) apart (*Photo 15*).

To draw a spiral, begin at one of the intersecting points on the top horizontal ring and draw a line down to the next horizontal ring and over to the next vertical line (*Photo 16*). Go back to the top ring and repeat the process.

You can use the indexing wheel to lay out patterns other than spirals. And, by adding more vertical and/or horizontal lines, you can create complex painting patterns.



Mark a starter hole on the indexing wheel.



Mark evenly spaced vertical lines.



Run the lathe at low speed to mark evenly spaced horizontal lines.



Lay out the spiral by drawing from intersection to intersection around and down the balloon.

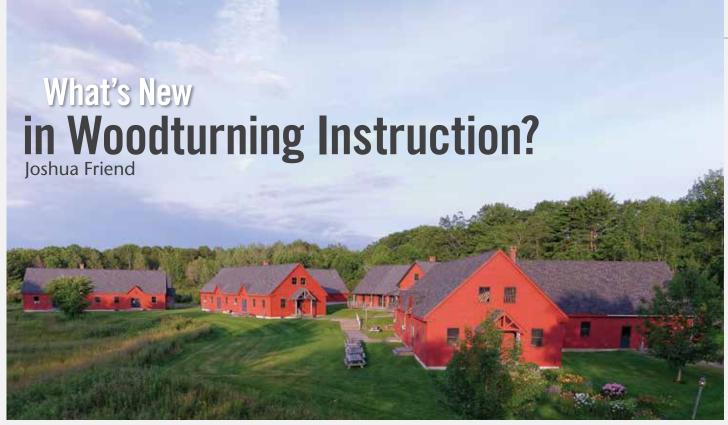
Attach the gondola to the balloon

Now that the balloon has been painted, it is time to attach the gondola. For that, I use ½6"- (2mm-) diameter wrapped silk cord, which you can find in the beading-supply section at a craft store. Cut four pieces about ½1" (32mm) long.

Mark four points equally spaced around the inside rim of the gondola. Put a drop of thin CA on a mark and hold the cord in place until the glue sets (*Photo 10*). Repeat the marking and gluing to attach the free ends of the cords to the balloon (*Photo 11*). Glue the cords onto the balloon in the same order as you glued them to the gondola so they don't get crossed. The balloon ornament is ready to take flight (*Photo 12*).

Bob Baucom first connected with woodturning while making a bowl in junior high shop class. From that point on, he wanted to own a lathe. After finishing graduate school and starting a business, he bought a General 260. Bob has done demonstrations at the North Carolina Woodturners' Symposium, the John C. Campbell Folk School, and woodturning clubs. He has helped teach woodturning to Boy Scouts, Girl Scouts, and others. Many of his turnings can be found in local galleries and private collections throughout the country. He can be reached at bobec81695@aol.com.

Frank Penta and Jason Groves provided their expert help photographing the finished balloons.



Center for Furniture Craftsmanship, Rockport, Maine
Photo: Mark Juliana

ver the past twenty years, the Center for Furniture Craftsmanship (CFC) in Rockport, Maine, has built a solid reputation in the development of fine furniture craftsmanship. Not one to sit on his laurels, Peter Korn, CFC's founder and executive director, is expanding the school's offering in woodturning instruction. The school is not new to teaching woodturning—it routinely employs an impressive list of faculty. But beginning in January 2014, students will be able to take a new 12-week intensive woodturning course geared toward professional turning. The course will cover a broad curriculum, including architectural work; production techniques for faceplate, spindle, and endgrain work; furniture components; milling with other woodworking machines for stock preparation, forming, and joinery; sharpening; tool-making; and business practices. As such, the course represents a bold departure from typical woodturning instruction.

A course specifically geared toward a career in woodturning? This piqued my interest. Demographically, most woodturners are older (retired) hobbyists, and not surprisingly most of the available instruction caters to that market. Many professional woodturners, after gaining enough experience, generate income by teaching and demonstrating for the hobbyist market, not by becoming dedicated practitioners. But Korn's vision goes beyond the demographics. He maintains that dedicated professional turners who possess the appropriate skills and who can build relationships with architects, designers, and custom builders have the opportunity to thrive creatively and economically.

I wanted to see CFC's woodturning shop in action, so I visited while the ninemonth comprehensive furniture program students were doing their one week of woodturning. The facility is impressive, with twelve Oneway 1640 lathes for students, plus one for demonstration purposes. I witnessed Stephen Gleasner teaching the furniture students spindle turning skills, such as beads, coves, and pommels, which are likely to be useful in furniture projects (*Photos 1, 2*).

The Beth Ireland connection

The intensive woodturning course at CFC will cover many facets of becoming a professional turner. Beth Ireland, an accomplished professional, will be the instructor. To get a better understanding of the significance of this new course, I caught up with Beth at SUNY Purchase, where she was the artist in residence. It doesn't take long to understand that she is an inspired teacher who, as Korn puts it, makes you believe that you can achieve anything. I found her optimism contagious.

Beth got her start in carpentry more than thirty years ago and is no stranger to hard work and long production runs. Her abilities are obvious. Her goal as a teacher is not just to impart the specific skills needed for predefined projects; she intends to help students experience the satisfaction of creativity through problem solving, so they can create what they envision. One of her first class projects is tool-making, emphasizing that stock tools tend to create stock end products, and custom tools (and grinds) increase possibilities.

As a professional turner, Beth caters to a wide array of clients beyond those you might expect; she gets commissions from toy designers, scientists, manufacturers, lighting companies, plumbing contractors, and religious organizations. She believes that this expansiveness is what makes turning so great. "When architectural jobs are down, other jobs are up," she explained. "Turning is really about the creative process of object making."

Beth believes that establishing the fundamentals by repetition—until skills become second nature—is the place to start for learning how to be creative. From a high level of skill and familiarity with materials and tools comes the possibility for creativity and art. She is thrilled about the prospect of having the same woodturning students for twelve weeks. "They will spend forty hours a week for three months, so the course is truly intensive and mimics the schedule of a real woodworker. The students will be totally immersed in the experience, so I'll be able to go further with them," she said. In addition to regular class hours, students will have shop access twenty-four hours a day, seven days a week.

After learning the necessary skills, students begin to develop intuition



Stephen Gleasner is one of many talented woodturning instructors at Center for Furniture Craftsmanship.



CFC has a well-equipped woodturning studio.

about materials and form, and then they can create work that excites them. A suitable market will follow: "Build it and they will come."

A look at Beth's website, bethireland.net, shows that she is adept at both functional and artistic work. This diversity stands as a testimony to her dedication to both skill and creativity. It is obvious that the new course at the CFC is very much about the special qualities Beth has to offer as an instructor. For more information about the new 12-week intensive woodturning course, including enrollment, visit woodschool.org.

Turning 20

This year is CFC's 20th year of operation, and, to mark the occasion, the

school will showcase a birthdaythemed woodturning exhibit at CFC's
Messler Gallery. Featured wood artists
include Mac Ray, Michael Cullen,
Harvey Fein, Mark Gardner, Binh
Pho, Dale Larson, Mark Sfirri, John
Beaver, Stephen Gleasner, John Jordan,
Christian Burchard, Chris Hoehle,
Steven Kennard, Hayley Smith, David
Belser, Bill Luce, Michael Mocho,
Michael Hosaluk, Jacques Vesery, and
Beth Ireland. The exhibit, which is
open to the public, will run through
January 2014.

Joshua Friend, a woodturner and writer, is a member of the Nutmeg Woodturners League, an AAW chapter. See jfriendwoodworks.com for examples of his work and contact information.







(Left) Beth Ireland is well versed in large-scale production of all kinds of spindle turnings, including balusters, newels, and columns.

Photo: Jenn Moller

(Top) Beth sometimes juxtaposes spindleturned architectural elements in surprising ways with these whimsical utility items.

From The Artifactory, 2009, Maple, 20" x 17"

(Bottom) **Beth Ireland,** Architectural Reliquary, 2011, Cherry, holly, glass, 5" × 10" × 2"

Collection of The Center For Art In Wood

Photo: John Carlano

Center for Furniture Craftsmanship's "Twenty-Year Birthday Celebration Exhibit"

Messler Gallery, Rockport, Maine

Through January 2014







(Above) **Dale Larson**, Bowl of Bowls, 2013, Pacific madrone, acrylic paint, oil, 5" × 18" (13cm × 46cm)

Photo: Dan Kvitka

(Left) **Mark Sfirri,** Six Scoop Ice Cream, 2001, Maple, paint, 17¾" × 4½" (45cm × 11cm)

(Right) **Michael Hosaluk**, Not of this World, 2013, Birch, acrylic paint, 15" × 8" (38cm × 20cm)

Photo: Trent Watts

HARMONY Barbara Dill



Harmony, 2013, Spalted wood, 5" × 41/2" × 41/2" (13cm × 11cm × 11cm)







ast year, the Professional Outreach Program (POP) committee invited me to be in their "Harmony" exhibit at the Tampa symposium, but I was not convinced I should take this on—I had never before intentionally turned a conceptual piece. I thought for a few days, talked to some people who encouraged me, and then accepted the invitation.

My first thought was of a note to represent music, so I tried to turn multiaxis musical-note forms based on the shaped note tradition (do, re, mi) that was a huge part of the southern church of my youth. Harmonic waves made while using multiple axes came next, obviously concrete thinking, but I had to try. The results were horrible.

After I gave up on those ideas, I started thinking conceptually about harmony with ideas like balance and equality. I looked around my shop and saw a multiaxis spindle I had made in 2005, before I became totally obsessed with figuring out a way to think about multiaxis turning (*Photo 1*). I had turned this successful form by luck, using the random-experimentation method. I also had made many candleholders and bottle stoppers using these random multiaxis cuts, but these pieces drew little attention, so I moved on (*Photos 2*, 3).

Harmony emerges

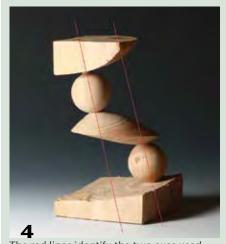
With balance and equality in mind, I started experimenting. The red lines on the piece in *Photo 4* are the two axes used to turn this piece. They are parallel to each other but not to the center axis of the wood, if it had been used.

It took me about four weeks to solve the many problems inherent in turning the piece I envisioned. One requirement of the POP exhibits is that the piece must fit into a 6" (15cm) cube, which meant I had to use this concept on a shorter, fatter piece of wood.

(Left) I keep samples of successful ideas to remember how I made them. I clearly mark the axes on each end to avoid spending time trying to figure out how I turned the piece. Cherry, $11" \times 3"$ (28cm × 8cm)

(Middle) Candleholder, Cherry, 13" \times 3" (33cm \times 8cm)

(Right) Bottle Stopper, Cherry, 5" × 3" (13cm × 8cm)



The red lines identify the two axes used. Notice that they are on the diagonal of the square, as opposed to the width or length.



The tool tends to bounce when entering the wood after lingering in the "air wood," especially when the speed is slow.



The toolrest is made from UHMW polyethylene.



I used card stock to measure the length and width of the bead.

The size and shape required for the wood made the turning more off balanced than when turning a long, slender piece of wood. The beads were so far off the toolrest that tool control was almost impossible. And, the cut at the base of the first bead was difficult to make because the tool had to enter the square wood at different depths.

Solutions

Speed helps, but when the wood is this off-balanced, speed is difficult (*Photo 5*). A friend suggested I glue pieces of wood to the sides of the problematic corner. I did this on the next turning and had much better results. I always use a ½" (13mm) spindle gouge for most of my multiaxis turnings, but this time, I used a ½" bowl gouge that

I had sharpened like a spindle gouge. This helped because the heavier tool did not bounce as much.

When making a bead (or sphere) on a wide piece of wood, the bead is several inches away from the toolrest, which makes it nearly impossible to control the tip of the tool. Increasing the speed was not the answer, so I made a small toolrest that could fit between the V cuts and support the tip (*Photo 6*). I made this toolrest from a square of ultra-high molecular weight (UHMW) polyethylene. The tap fit the threads of an old toolrest. Hands must be carefully kept behind the wood as it rotates!

Measuring the bead is challenging. I used card stock to slide into the V cut to measure the length and width more accurately (*Photo 7*).

The next problem occurred when the piece was mounted on the second axis—there is not much wood supporting this axis (*Photo 8*). To solve this problem, I hot glued a piece of wood in the space between the sides of the V cut. I then used strapping tape to secure the wedge (*Photo 9*).

The wood was wide and had to be turned slowly to avoid the vibration of my lathe because of the wooden floor in my shop (I have since had the floor reinforced, which has helped). Now that I understand the process, I can first take some of the wood off that I know will come off later (*Photo 10*).

Barbara Dill is a retired nurse. She has been turning wood since 1990 and has been teaching and writing about multiaxis turning since 2006. More of Barbara's work can be seen at www.barbaradill.com.



A wedge of wood hot glued into the V space supports the second axis.



For security, strapping tape gives additional support for the wedge while turning.



I learned from many practice pieces that excess wood could be removed from the second axis before turning the first axis, which helped with balancing the wood while turning.

Out of a Limb: NATURAL-EDGE BOWLS

Emmett Manley



urning a natural-edge bowl can be daunting for some beginners. Even experienced turners may dread the process of splitting a log, locating the bark-side center, mounting the piece between centers, and removing a lot of wood to establish the outside shape and a tenon.

There is, however, a simple technique for making small, natural-edge bowls from green wood. It proceeds quickly with immediate and pleasing

results, so new turners are not intimidated. Compared with the traditional method of making a natural-edge bowl, less wood has to be removed. A few cuts begin to reveal the bowl's emerging shape.

Instead of splitting a log, use a piece of tree limb, which is widely available from tree trimmings (*Photo 1*). Bradford pear is perfect for this project, and limbs are usually plentiful following a windstorm. For the

photos, I used sweet gum, another tight-bark wood.

Process

Cut a 6"- (150mm-) long segment from a 4"- (100mm-) diameter limb. Drill a hole into the wood for a screw chuck (*Photo 2*). Mount the log so the grain is perpendicular to the lathe axis, using a screw chuck and live center (*Photo 3*). If you cannot find a 4" limb, cut a piece with a length



Cut a branch with the length one and a half to two times its diameter.



Drill a hole for the screw chuck.



Mount the limb onto a screw chuck, and use a live center for support. Spin the wood a few times to be sure it is centered and does not hit the toolrest.

that is one and one-half times the diameter.

Then, using a ¾" (10mm) bowl gouge, turn the outside of the bowl. Take pull cuts, working from base to rim (*Photos 4, 5*). After you have removed the bark on the base, establish a tenon (*Photo 6*). Remove the tailstock so you can complete the foot. If necessary, use thin CA glue to stabilize the bark and the pith (*Photo 7*).

Reverse the bowl and hold the tenon in a scroll chuck. Drill a depth hole to make hollowing easier and to avoid turning through the bottom (*Photo 8*). To shape the inside, use push cuts from the rim to the center (*Photos 9, 10*). Reverse the bowl again, holding it in a jam chuck, and remove the jaw marks from the foot.

Bingo! You have completed a neat natural-edge bowl in short order (*Photo 11*).

Practice

Practice with a 2"- (5cm-) diameter branch about 4" (10cm) long, using a spindle gouge. You can produce a miniature bowl in little time. Then, it is just a matter of scale as you use larger limbs. Practice improves turning skills.

You can vary the shape of the bowl by changing the diameter-to-length ratio from 1:1.5 to 1:2 or to whatever pleases you. The pith remains in the bowl, but that has caused no problems and often adds character. Wrap your green-wood bowl in paper and allow it to dry, after which you can sand and finish it using your favorite method, or leave the wood unfinished.

Emmett Manley is a retired medical scientist/professor who discovered he enjoyed woodturning in 2005. He studies and collects wood native to western Tennessee and turns wood to useful items. He may be contacted at emanley1@comcast.net.



Begin turning the outside of the bowl.



A few cuts will begin to reveal the bowl's shape.



Complete the outside of the bowl and the tenon at the base. Remove the bark on the bottom and complete the foot.



If necessary, apply thin CA glue to stabilize the bark. Ensure the glue has cured before starting the lathe again.



Grasp the tenon in a scroll chuck and drill a depth hole to begin hollowing the inside.



Take cuts from rim to base with a bowl gouge to hollow the inside.



Check your progress to be sure you do not turn through the bottom.



The inside is completed. The bowl can now be reversed in a jam chuck to finish the foot.

DECEPTION BY DESIGN

THE LONG HISTORY OF WOODTURNING AND

MAGIC

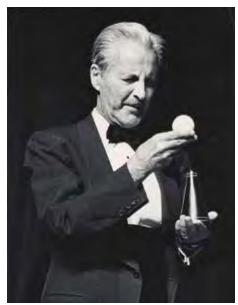
Stan Wellborn

few years ago, Angelo Iafrate was called by a friend who asked if he could turn a Morrison pill box. "Of course," he replied. "What's a Morrison pill box?" He got a complicated answer, describing a thin concealed shell, a springloaded plunger, and hidden cavities, but finally his friend said, "Let me just send you one."

Iafrate received a small turning that consisted of several hollow shapes that fit together cleverly to enclose a hidden turned sphere. He later learned that he was holding a piece of magic history—a clever device employed by stage magicians for more than a century.

Iafrate shelved the project for more than six months. Then one day, he took detailed measurements of the piece. Using an AutoCAD program, he re-created the shapes and turned a copy from scrap wood. He finished a final version and delivered it to his friend.

"It was pretty much a disaster," Iafrate says. He had crafted the piece with close-fitting seals and tight tolerances—too good to be used reliably in a stage performance. "Magic apparatus has to be absolutely precise, but it also has to work flawlessly every time, so the magician can perform his act without any hang-ups or giveaways," Iafrate says. "So, after the



Magicians have used turned objects in their tricks and illusions for more than a century. Here, magician Dai Vernon performs a "ball and cone" routine in about 1960.

Photo: Charles Reynolds

piece was sent back to me, I ruined the fit and made a looser piece. It worked so well that I've had standing orders ever since."

Today, Angelo Iafrate, a former AAW Board member and Board president, is one of the most highly regarded producers of turned magic articles in the world. He continues a centuries-old—but little known—tradition that connects woodturning and the conjuring arts.

Trickery and turning

Since before the Roman Empire, sleight-of-hand artists used turned objects to entertain and trick onlookers and separate the gullible from their cash. Turned magic wands, often made of polished ebony and tipped with silver, have been a necessary prop in stage acts for hundreds of years.

Probably the earliest connection between woodturning and magic is a trick known as cups and balls. It "may be said to be the groundwork of all legerdemain—the very earliest form in which sleight of hand was exhibited," according to the book *Modern Magic*, published in 1876 by "Professor Hoffman," the pen name of a magic aficionado who described in detail how various pieces of stage equipment were designed. Cups and balls incorporate one or more small spheres and three turned cups that can be stacked together or used separately. The magician uses misdirection and practiced movements to make the balls disappear and reappear under the cups to create an effect that is mystifying and deceptive. The chop cup (see Sidebar, page 43) is a related device using a single container.

According to Bill Palmer, who claims to have the largest collection of turned cups and balls in the world, the trick originated thousands

of years ago, probably in the Indus Valley of Asia. Today, it is performed in markets and street fairs from Mumbai to Marrakesh and Kyoto to Key West. It remains a staple of all magic acts. Turned wooden cups are now typically found in the collections of magic enthusiasts.

In the late 1800s and early 1900s, demand from magicians may well have been responsible for preserving precision woodturning at the time. Canadian David Ben, a historian of magic, says that European magicians demanded crafted apparatus that drew on the elaborate, florid spindle shapes used in Rococo furniture. "Magicians appreciated the baroque shapes that suggest mystery and disguise," Ben says. "A skilled woodturner could produce profiles that enhanced the magical effects." Designs produced in magic items were subsequently incorporated into candlesticks, newel posts, decorative boxes, architectural flourishes, and other ornate work produced during America's Gilded Age.

Turned pieces from the early part of the twentieth century, prized by collectors today, were generally used in so-called "close-up" magic, performed in small theaters, clubs, or parlors. A physique amusante magic set from France, circa 1880. It includes nineteen turned wooden tricks. Pieces like these may have helped revive precision woodturning in the late nineteenth century.

Photo: Potter & Potter Auctions



Turning and magic in America

This part of the story must begin with Floyd G. Thayer, a master turner who was the most skilled artisan in the magic trade for more than a half century. Born in Vermont in 1877, Thayer moved to California in 1891, and in 1902 opened a small woodworking business in Pasadena. Using a foot-operated treadle lathe, Thayer began producing billiard balls, gavels, souvenirs, and other wooden specialties. He eventually caught the attention of traveling magicians and began

turning wands, candelabras, tambours, and other stagecraft apparatus. In 1912, he opened Thayer's Magic Shop of the West, describing himself as "Expert Wood Turner and Magical Mechanician," and began making magic goods full time. He eventually employed a small staff of workers whom he instructed with this admonition: "Each piece you make should be better than the last one. Otherwise, you've gone as far as you're ever going to go."

One of the staples of magicians over the centuries is the ball vase. It is a turned device that sits on a small **\rightarrow**





(Left) Floyd G. Thayer, the leading turner of magic tricks and props for more than a half century, at his lathe in 1939. The company he founded in 1912 is still in business today.

Photo: Phil Schwartz Collection

(Right) Angelo lafrate, former AAW Board president and a leading turner of magic tricks today. A chance encounter steered him to this branch of turning. Now, he has turned hundreds of these pieces.



An undated photo of workers in F.G. Thayer's shop. Photo: Potter & Potter Auctions



Clingo billiard balls, turned by F.G. Thayer in about 1925. The set consists of four 15/8" (16mm) balls and a matching shell for a classic trick called multiplying balls. The pieces are scored with a concentric pattern to mimic the appearance of golf balls.

Photo: Potter & Potter Auctions

pedestal and encloses a turned sphere or egg shape that can be removed and examined by the audience. An intermediate layer of the vase, disguised with carefully fitted beads and coves, incorporates a hollowed half-sphere of the exact size and color of the original ball. The magician, using practiced moves, can make the ball

appear and disappear in ways that confound onlookers. Thayer's ball vases have been described as "the crown jewels of magic."

In their lavishly illustrated biography, The Ultimate Thayer, collectors Philip Schwartz and Robert J. Albo portray Thayer's turnings in detail. Schwartz, who amassed large

John McKinven was an accomplished magician and a prolific woodturner. In his later life, he became close friends with Angelo Iafrate. This is one of McKinven's working drawings for a magic ball vase.

Photo: Potter & Potter Auctions

Thayer collections, observed of his turnings:

Exquisite in the artistry of their lines, precise in the tolerance of their measurements, deceptive in their disguised simplicities, and elegant in their overall appearance, they have poise and presence that command attention. It is not at all surprising that they have become magic's classic treasures. No wonder they are prized more to possess than to perform.

Of the Thayer ball vase, Schwartz writes, "It is just as representative of magic as a white rabbit or a silk top hat. For magic collectors, even more so."

Like Angelo Iafrate, Thayer made the Morrison pill box by turning two half-shell balls with skins as thin as eggshells in order to fit snugly inside the vase, placing a spring-loaded plunger under a finial to push the two halves of the ball together seamlessly to create the trick mechanism. Thayer's earliest turnings were made of mahogany and orange wood, but he eventually began using hard maple, boxwood, rosewood, and other densely grained woods because



A pair of Morrison pill boxes by Angelo Iafrate. Photo: Michael Colella

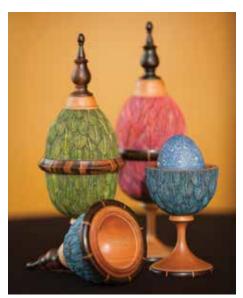


A magic ball vase made in 2006 by British turner Paul Coker. It is made from African blackwood and bone, and uses a real goose egg. 12" × 3½" (30cm × 9cm)



A Morrison egg vase by John McKinven. A leading collector of his work says McKinven's pieces are so fine that they are rarely used in performance, but instead go straight to collectors.

Photo: Philip Schwartz



A set of egg vases, with appropriate decoration by Angelo lafrate in collaboration with Jacques Vesery.

Photo: Michael Colella

of their more stable nature. Thayer's pieces were necessarily small as well: his foot-powered lathe had a swing of only five inches.

Thayer's company, now known as Owen Magic Supreme, is regarded as the best producer of magic apparatus in the United States. It still produces exquisitely turned pieces.

Modern magic turners

Today, turning magic articles remains a niche enterprise, supported largely by collectors and historians. Four woodturners continue the Thayer style and remain the leading practitioners of the tradition.

Alan Zagorsky, president of Owen Magic Supreme, has the most

unbroken link to Thayer. His parents, one-time vaudeville magicians, introduced him to the world of magic. He learned woodturning from Thayer protégé Carl Owen, but his first results were mixed. "My spheres were misshaped, my bowls exploded, and I was an impatient teenager," he recalls. "I decided »

Evanna Evans: Queen of the Chop Cup

Evanna Evans Brening is a woodturner with deep roots in magic. Her mother, Celeste Evans, was a renowned magician who entertained worldwide. Evanna, who assisted on stage as a child, learned to juggle, use stilts, and walk a tightrope. Today, she puts that dexterity to use at her lathe.

Around 1999, Evanna watched a woodturner in Florida make a small box at a tool show. She was transfixed. "I couldn't move," she says. "I couldn't



A collection of chop cups by Evanna Evans, the world's leading producer of this woodturned magic device.

stop watching. It was literally a magic moment." She knew that she must learn to turn wood, and told her husband that she had to have a lathe. She later took lessons from the same turner she had seen demonstrating.

Some years later, while visiting with a magician friend who performs at Pigeon Forge in Gatlinburg, Tennessee, Evanna described her enthusiasm for woodturning. The magician suggested that she consider turning chop cups. "Before I knew it, I was selling them out at magic conventions," she says. Today, Evans is celebrated among magicians and collectors for her chop cups. She has sold hundreds of her version of the piece, a staple in the repertoire of many magicians.

Evans's work came to the attention of Francis Ng, a Singaporean collector who has amassed the largest collection of chop cups in the world. Ng and other collectors have purchased nearly all her pieces, which largely helped her pay for nursing school. Evanna plans to take a full-time nursing job but intends to continue producing chop cups to satisfy a growing demand. She says that the word *can't* was never in her mother's vocabulary. "I'm pretty sure it is a trait I inherited," she laughs.

that turning was just too difficult." Zagorsky worked in the art and design side of the business for several years. Then, on a vacation in Alaska, he saw a turner making tribal bowls from exotic woods. He returned home and began turning again, incorporating Native American designs in magic pieces and pioneering the use of segmenting, which added stability to his ball vases.

Iafrate also emulates the work of Thayer in his turnings. When he began making magic devices, though, he had little understanding of magic and the intricate equipment magicians used. In the past decade, he sought out others in the magic crafts who would share their trade secrets.

To date, Iafrate has produced a huge portfolio of turned pieces that collectors usually snap up quickly.

He estimates that he has produced 200 ball vases alone. Working with Jacques Vesery, Iafrate learned to decorate his pieces with carved feathers and other flourishes, and, for a 2013 magic symposium in Washington, DC, he produced a chop cup with a lid resembling the U.S. Capitol dome.

Iafrate also learned that the Morrison pill box he first reproduced had originally been turned by John McKinven, a Chicago advertising executive who was an accomplished magician and a prolific turner. Iafrate became close friends with McKinven and inherited a set of his turning tools after McKinven died in 2006.

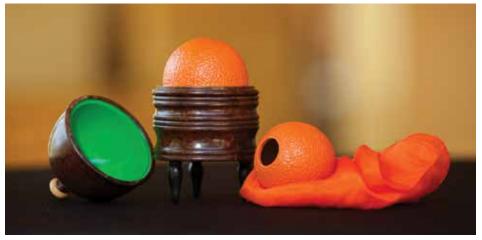
Finally, British ornamental turner C. Paul Coker is on the short list of craftsmen still producing superb magic devices. Coker lives

in Northhamptonshire, about 70 miles north of London, where he creates some of the most distinctive magic turnings available anywhere. They incorporate exotic woods embellished with bone and metal, in shapes that draw heavily on the classic turnings produced in Europe in the 1800s, particularly from designs by the seventeenth-century French turner L.E. Bergeron. The pieces, produced on a Rose Engine lathe and almost identical to those popular in parlor magic in the early twentieth century, are increasingly in demand by magicians and collectors.

Coker is known for creating pieces, commissioned by private collectors, that have specific and elaborate themes. Like Iafrate, he must ensure that his pieces actually operate as advertised. "A piece made for magic has to convey a sense of intrigue and wonder," he says, "but it also has to work. That means constructing it with enough 'breathing space' that the magician knows it will never bind or seize up on stage. It presents an interesting challenge for the turner."

Precision, design, and gimmicks

Making a magic device that is beautiful, that operates reliably, and that will stand up to years of



An orange vase by Angelo lafrate.

Photos: Michael Colella



stage use requires the turner to incorporate designs that are accurate to within thousandths of an inch and that employ a variety of conjuring gimmicks, or "loads"—hidden springs, magnets, and secret spaces. While many of these gimmicks have been elaborately described and are widely available, magicians and magic manufacturers alike remain close-mouthed about many of the lesser-known attributes of a successful apparatus.

Serious professional magicians still adhere to a code of ethics that bars them from revealing how a trick works. To be sure, that tradition is often honored in the breach today, with amateur magicians online and eager to expose secrets, particularly for close-up magic in which turned items would typically be used. And dozens of books available through magic suppliers detail how classic magic devices work.

To a degree, that is why modern magic has gravitated toward elaborate stage shows, with large-scale constructions that are a far cry from the more intimate close-up magic apparatus designed and produced by woodturners. "Today we find that most turned pieces are never used in performance," says Gabe Fajuri, a curator at Potter & Potter, a Chicago auction house specializing in magic paraphernalia. "They go directly into collections of very avid magic enthusiasts."

Iafrate himself understands this well. "I realize that much of my work will not appear on stage. Most of it ends up in private collections, where it sits on display on a shelf," he says. "That is simply a fact, because there is a small but enthusiastic community of collectors who are interested in magic craft as much as actual performance magic."

But Iafrate and others continuing the tradition find that making

magic offers a special kind of appeal, combining design and technique with ancient mechanisms for an exacting group of enthusiasts. To create an object that gives delight and a sense of mystery to others is reward in itself.

Stan Wellborn is a retired journalist and enthusiastic woodturner in Washington, DC. He is currently a member of the AAW Board of Directors.

Additional sources on woodturning and magic

Here is a sampling of the information available to turners who would like to create some of the magic pieces described in the article:

Angelo lafrate MajicBrand. lafrate continues the Floyd Thayer tradition with his delicate and elegant magic vases that incorporate modern embellishments, majicbrand.com.

Cups and Balls. The Cups and Balls Museum has some 2,000 sets of this trick; several hundred are turned wood, cupsandballsmuseum.org.

Evanna Evans Chop Cups. The creations of Evanna Evans can be seen at knottygirlwood.com.

John McKinven Auction Catalog. McKinven, an amateur magician and accomplished woodturner, left many of the finest examples of modern magic turning. Most of these items were purchased at auction after his death. However, the auction catalog is still available and is an excellent guide to the exemplary design of magic turnings. potterauctions.com.

Keep the Wheels Turning: The Floyd Thayer Book. Owen Magic Supreme published this two-volume biography and extensive history of Floyd Thayer and his business partner Carl Owen. Volume two reproduces many of Thayer's schematic drawings and blueprints, owenmagic.com.

Making a Morrison Pill Box. Detailed plans are available for \$5, at www.jamesriser.com.

Modern Magic by "Professor Hoffman." The pseudonymous professor wrote several books that remain excellent resources on woodturning magic. Published in the late 1800s, the books are available as downloads for e-readers. The two most relevant volumes are Modern Magic: A Practical Treatise on the Art of Conjuring, and More Magic: A New Book on Conjuring.

Ornamental Turned Ball Vase. The British turner C. Paul Coker produces outstanding magic pieces that harken back to a classical magic age. You can view his work at www.cpaulcoker.co.uk/index. html. His creations are among many available from Five of Hearts Magic, a British magic supplier, at fiveofheartsmagic.co.uk.

The Ultimate Thayer. This two-volume set, written by collectors Robert J. Albo, M.D., and Philip Schwartz, is the most comprehensive compendium of Floyd Thayer's magic production. However, only 400 copies were published, and only a few copies are available for purchase, ultimatethayer.com.

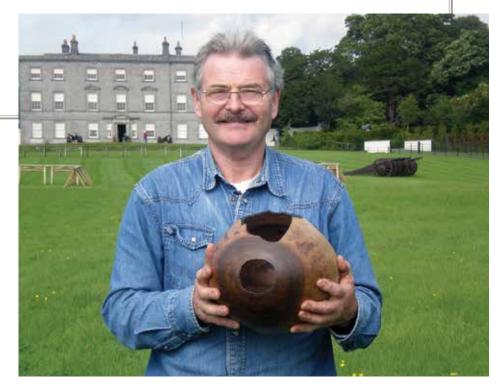






Segmented version of the classic cups and balls trick, by Angelo lafrate.

The Peace Bowl



Liam O'Neill stands on the battle site near where the tree once stood.

turned wood bowl. The
Northern Ireland peace process. How are they related?
Let me tell you. It all began in 2005
when Fergal Martin approached me.
Martin was in charge of the Battle
of the Boyne site-restoration project
and wanted to know if I would come
to Oldbridge House and have a look
at a remarkable walnut tree. The tree
would have been forty years old when
the battle was fought in 1690. Its roots
had become diseased and the wind
blew it over during the winter of 2004.

I was subsequently commissioned to make a number of pieces from the wood and I elected to turn hollow vessels. I kept one particularly beautiful piece aside for a special purpose.

Brief historical background

The Ulster question has bedeviled Irish–British relations since the final defeat of the last standing Irish army at the River Boyne in 1690.

The protestant British King William of Orange set a process in motion that led to Catholic Ireland being governed by a Protestant ascendancy.

In 1922, following a war of independence, twenty-six of the thirty-two counties were granted independence. A separate state was set up in Ulster and retained as part of the United Kingdom to accommodate the largely Protestant majority who lived there. A significant Catholic minority found themselves cut off and second-class citizens in a state where they

were treated as a fifth column of the Nationalist South.

In the late sixties, Catholics in Ulster began demanding civil rights and equal opportunities. The largely Protestant security forces attacked their marches and a thirty-year spiral of violence and retaliation led to 3,500 deaths.

Partition

Ireland has four provinces and three of them had Catholic nationalistic majorities. The province of Ulster, on the other hand, had a majority of Protestants who were determined to remain part of the United Kingdom. In the treaty negotiations that followed, Ireland was partitioned.

The government of the state that developed in Northern Ireland enjoyed a majority, but felt vulnerable to what they perceived as the nationalist threat. By fair means or foul, they would ensure that the minority would never be in a position to change the status quo.

Meanwhile, in the 1960s in the United States the civil rights movement marched on Washington, DC, to hear Martin Luther King Jr. speak. The Catholics of Northern Ireland took notice and formed their own civil rights movement. At the outset, most marchers wanted equal opportunities in housing, jobs, and politics—they were not at all interested in reuniting

Ireland. The government's heavy-handed tactics provoked a backlash that culminated in the emergence of the provisional IRA.

During the 1970s, 1980s, and 1990s, Northern Ireland endured a terrible war as paramilitaries on both sides outdid one another in acts of savagery. Throughout the conflict, there were those who kept channels open with the leaders of these groups and eventually it became clear that there would never be winners. A way of making peace would have to be found.

The peace process that followed was a tortuous series of negotiations. The U.S. and UK governments provided internationally experienced negotiators. The government of the Republic of Ireland played a key role in assuring the loyalist majority that they had no designs on establishing hegemony over the North by removing from the constitution the article that claimed jurisdiction over Northern Ireland.

The peace conference that finally reached a settlement was held at St Andrews in Scotland in October 2006.

The breakthrough

All the main players in the peace negotiations were present at St Andrews:
British Prime Minister Tony Blair;
Prime Minister of the Irish Republic,
Bertie Ahern; Dr. Ian Paisley, leader of
the Ulster Loyalists; and Gerry Adams,
who as president of Sinn Féin, represented the Nationalist Republican
people of Ulster.

It was make-or-break time. Dr. Paisley's Democratic Unionist Party (DUP) and the Sinn Féin republicans had become the two most influential leaders in Northern Ireland. Tony Blair and Bertie Ahern had an amazing working rapport. If ever there was to be a settlement of the bedeviling Ulster question, this was it.

For two days the parties struggled to come to an agreement, but on

the evening of the second day, a sense of gloom descended as the parties struggled to come to terms with each other. Dr. Paisley and his wife were anxious to get home to Ballymena to celebrate their wedding anniversary and were also worried about what kind of reception they would get in Belfast if they signed a deal. Sinn Féin were behaving as if there was not going to be a deal and were trying to ensure that it was the DUP who walked out first and caused failure.

According to Blair's right-hand man Jonathan Powell, the British side was starting to prepare for a breakdown of the talks. Bertie Ahern was worried about the scenario arising where he would be going into a general election campaign in the Republic the following year with an unresolved impasse in the peace process and was probably the most inventive negotiator there for that reason.

The gift

Blair and Ahern, along with their respective assistants, had dinner together.

Ahern said to Blair, "You know, it's Dr. Paisley's fiftieth wedding anniversary?" "Ah, yes," said Blair. "Are you giving him a gift?" Ahern told Blair he had a walnut bowl from the Battle of the Boyne site and intended to present it the next day.

On Saturday, all the parties assembled for a final plenary session. The room was jammed. Bertie Ahern took the bowl in his hands and started to make his way across to Paisley at the far end of the room. Everyone realized something was happening and the room went quiet. Ahern said, "I believe it is your fiftieth wedding anniversary. I have brought you a gift on behalf of the Irish Government." Dr. Paisley then did something he had never done before—he spontaneously reached out and shook Bertie Ahern's

hand. The whole gathering looked on in astonishment.

Visibly moved, Dr. Paisley announced, "Mr. Ahern has just explained to me that this vessel is made of walnut from the site of the Battle of the Boyne. Today this bowl has come home. We have been working hard for three days and I think we have seen the first sign of a new light. I hope that this light shines not just on those in this room, but also on our children and grandchildren." In the midst of the applause that followed, Gerry Adams was heard to say, "I think we are going to see business being done after all."

The big question

Why did the gift of the walnut vessel have such an impact?

Veteran TV reporter Tommy Gorman, who witnessed the event and told me about it, said it would be no exaggeration to say the talks were headed for the deepest part of the ocean. When Bertie Ahern presented the gift, it changed everything. Paisley's attitude was key to the success of the talks and he interpreted Ahern as saving, on behalf of the Irish nation, "The orange tradition has nothing to fear from the South. We are not seeking to denigrate your culture; in fact, we recognize your right to celebrate it. This bowl made from walnut from the site of the Battle of the Boyne proves it."

I had no idea when I was asked to make the bowl what it would be used for. Any woodturner could have made it. I was blessed to have my work used in this way.

Liam O'Neill is a founding member of the AAW and regularly teaches workshops in the U.S. More of O'Neill's work can be seen on his website, liamoneill.com.

BINH PHO

at the Mobile Museum of Art David M. Fry



Installation view

uch of the contemporary art world craves spectacle that awes through its scale, complexity, or vivid depiction of the human condition, from the heroic to the grotesque. At the same time, paths for artists to gain the public's attention have never been more demanding and competitive in a culture of fast-paced cinema, video games, and lavish stage productions offering wrap-around stimulation.

Two figures familiar to the wood-turning community rose to the challenge last winter with an exhibition at the Mobile Museum of Art, a venue with a history of displaying and collecting artwork in wood. Featured artist Binh Pho joined forces with writer/curator Kevin Wallace to bring to life a visual and literary amalgam—Shadow of the Turning—that was audacious in almost every way. Replacing

the typical descriptive catalog with a highly pictorial, jointly imagined work of fiction, Binh used the elaborate tale to frame a new body of work. In essence, the art became illustration for the story. Pulling out all the stops, the combined project sought to "blend... the mythic worlds of fairy tale, fantasy, romance, and craft traditions [through] woodturning, sculpture, painting, and art glass."

This museum "solo" show, still a rarity in woodturning, also departed from custom by tapping seventeen studio collaborators, including Alain Mailland, Joey Richardson, and Hans Weissflog, to advance a tale that itself entwined a similar number of people. Sometimes subtle, sometimes obvious, the contributions of the other artists appeared in numerous works. Even so, the heart and soul of the art surely belonged to Binh.

Set design

After entering the exhibition hall, I was struck by the vertical thrust of the props and artwork, with room dividers and pedestals surrounding a procession of four 7'- (2.1m-) high wood slabs. Tongues of fire or turbulent ocean waves rushed upward through two of the walnut sections, festooned with paintings, turnings, and metalwork. An electric guitar erupted from a wall hanging. A clear majority of the fifty pieces on display stretched higher than wide, with several ultra-fragile vessels rising 17" (43cm).

Adding to the dynamic presentation was the decision by Binh and MMA Chief Curator Paul Richelson to configure the space so that visitors could see through almost the entire exhibition from many points on the floor. The outcome resembled a giant installation—a total environment linked by narrative—with objects staggered much the way Binh layered the elements of his individual vessels with piercings and opened panels. At both levels, the approach invited progressive revelation.

Meanwhile, tendrils of translucent colored glass encircled brightly painted scenes on wood. Buildings in 2D and 3D rose here and there. The silhouettes of dancers, musicians, and fantasy warriors posed amid recurring motifs of peacock feathers, dragonflies, and cranes,



Roots of Heaven, 2012, Cast glass, Bradford pear, gold leaf, acrylic paint, 17" × 11" (43cm × 28cm)

Pendant inside the vessel, collaboration with Ron Gerton: 14k gold, sterling silver, porcelain

Collection of Marty and Barbara Bosch



Balance 2, 2011, Boxelder, acrylic paint, $14" \times 9"$ (36cm × 23cm)



Opening night reception.

while a celestial soundtrack played in the background. Nearby signage for each work highlighted its significance in the novel's cosmic drama of conflict, love, and self-discovery. By the end of my visit, the experience felt vaguely like immersion in a new-age shrine.

Art and architecture

The structure of the exhibit and its individual works suggested the enduring importance of architecture to Binh, who studied the subject in college in Vietnam. Indeed, after he fled his war-torn country, he constructed huts for himself and others >



Architect of the American Dream, 2010, Boxelder, maple, tulipwood, acrylic paint, $14" \times 12" \times 10"$ (36cm × 30cm × 25cm)

Collection of Dr. James and Elizabeth York



Promise, 2009, Maple, boxelder, acrylic paint, $7" \times 7" \times 6"$ (18cm × 18cm × 15cm) Collection of Dr. James and Elizabeth York

while stranded as refugees on a Malaysian island.

Many years later, when he started exploring his roots through expressive woodturning, Binh developed distinctive vessel forms that evoked key elements of buildings. Characteristically tall with vertical sides rounding near the base, such pieces initially focus the viewer's eye on the exterior. The narrow diameter at the rim restricts the view of the inside but still permits full illumination within. The elongated shape allows wall piercings to achieve maximum impact by providing extended glimpses of interior colors, designs, and shadows that emphasize the vessel's three dimensionality. Many of the cutouts bring to mind architectural features such as louvered panels, leaded glass, shoji

screens, doorways, wrought iron gates, rectilinear superstructures, and city skylines. Other piercings suggest forest shelters constructed of sinuous branches and leaves. In most cases, the openings generate a sense of habitable space.

In the Mobile show, Binh's preoccupation with edifice found further expression in the Jeffersonian columns and dome of *Architect of the American Dream*. An artist's studio itself became a focal point in *Secluded Abode*. Occasionally, Binh inverted his distinctive open forms to create a sense of domestic enclosure, as in *Eternal Return* and the ultimate dwelling space, *House of Gelkandars*. Even his shallow open bowls occasionally topped out in jagged skylines.

It would be simplistic to suggest that Binh's shapes here could be

entirely understood as stage sets for literary scenes. In fact, the profiles of his tall pieces often resembled masks more than buildings. It was tempting to also view these constructions as blended portraits of the novel's characters with openings revealing their core identities and, ultimately, the maker's own volcanic imagination and memory.

Beyond architecture and character study, Binh's work has progressively used art to display and engage other art, usually through applied ornamentation and assemblage. For example, sculpted butterflies alighted upon the delicate walls of *A Home in the Woods of Imagination*, the story's concluding illustration. More oblique interaction was evident in *The Exhibit of Sky and Earth*, which placed miniature vessels on pedestals atop a much

larger, roofed hollow form. Nearby, wall-hung assemblages featured decorative panels and niches for complementary vessels. The freestanding slab displays magnified the drama and interplay, at points lifting vessels and paintings to eye level and above. And, highly decorative wood bowls nestled within cast-glass jackets of chartreuse and amber filigree.

Imagery and color

While incorporating architectural elements into his bowls, Binh has also incised figures often found in decorative Asian art, such as dragonflies, birds, and flowers. These see-through forms sometimes border solid paintings of the same subject to create negative-positive balance or tension. In his earlier autobiographical artwork, such traditional symbols had deeply personal meanings for the artist, and it may not be unreasonable to assume continuity of symbolism in the new work. Butterflies and dragonflies, for example, usually represent freedom and hope, as well as tokens of unseen worlds. Peacock feathers almost always signify dreams. The primordial elements fire, water, and earth have frequently surfaced in Binh's work, while the Chinese Zodiac similarly recalls ancient Asian cosmology.

The story Shadow of the Turning, however, takes place in contemporary America, and the imagery extends beyond Eastern spirituality to more corporeal preoccupations of modern life, particularly those of young males—rock music, ritualized combat, and hot young women. Like many of the Asian motifs, the action figures tend to be generic, sometimes rendered entirely in silhouette. When they take on detail, they often emerge as the fiery goddesses, beasts, and pixies of fantasy book covers. Occasionally, the graphics incorporate cartoon effects, such as visualized sound waves at a rock band performance.

The new work is not only wallpapered with imagery but also saturated with color. Rarely, if ever, has woodturning seen such a seething confluence of hues, from coral, cerulean, and lavender acrylics to gold leaf and solid metals. Paint finishes also vary—sometimes satiny-smooth and other times stippled or finely ribbed. Unexpectedly, the abundance of applied pigment occasionally makes space for swaths of unpainted wood, such as the colorful boxelder

in *A Home in the Woods of Imagination*. Unlike Binh's museum show in Long Beach, California, however, the Mobile exhibition did not include any works with a natural finish throughout.

A deft hand

I suspect that very few people left this exhibition without being astonished by the technical mastery on display. Any woodturners there undoubtedly gaped at the skill and constant vigilance required to turn tall vessel walls



Eternal Return, 2010, Wood, rocks, acrylic paint, $17" \times 12" \times 10"$ (43cm \times 30cm \times 25cm) Collection of Bob Bohlen and Lillian Montalto



to ½16" (1.6mm) translucence, sketch and mask intricate designs, and cut and color the details cleanly—all while supporting and otherwise protecting the delicate membranes along the long path to completion. It would be interesting to know the vessel mortality rate during the extended gestation.

Although Binh's technical prowess developed under the influence of numerous woodturners, three stood out as his style matured: Frank Sudol, pioneer of diaphanous and beribboned vases; Giles Gilson, conqueror of the airbrushed vessel; and Hugh McKay, glass artist, tool wizard, and midwife to impossible hollow forms. In an amazingly short time, Binh mastered the finer points of each skill/technology and emerged with a fusion of shapes and content that he can truly claim as his own. In the process he became very productive, turning out imposing numbers of complex, laborintensive pieces while working a day job. Along with his collaborators, six assistants helped him prepare for the Shadow exhibition.

The catalog(s)

While Shadow of the Turning was published as the official exhibition catalog, Kevin's River of Destiny: The Life and Work of Binh Pho remains essential reading even though it features work of the earlier Long Beach show. This 2006 biography interweaves commentary on Binh's symbolism and aesthetics with the riveting story of his youth and harrowing escape from Vietnam and his ascent as an American artist. None of this is contained in the current book.

Shadow serves as a catalog largely through its appendix of captioned and page-referenced thumbnails. Full-frame and close-up photographs taken by Binh and Deryl Duer illustrate the text itself, but identification of individual pieces and any collaborators is complicated by the absence of nearby





(Left) A Home in the Woods of Imagination, 2012, Boxelder, sycamore, acrylic paint, 14" × 9" × 9" (36cm × 23cm × 23cm)

Collaboration with Joey Richardson

Collection of Paul and Sheri Robbins

(Right) The Exhibit of Sky and Earth, 2012, Maple, paper, acrylic paint, 14" × 7" × 7" (36 cm × 18cm × 18cm)

attributions and physical descriptions. More than eighty thumbnails appear in the appendix, but only fifty works filled the show. The discrepancy arises partly because several thumbnails with the same title represent different configurations—for example, a double vessel, a freestanding glass enclosure, and a stand-alone wood vessel. It also appears that identical glass castings enclose thematic pieces with different names. Not every exhibited piece appears in the catalog.

Although its cover describes *Shadow* as "an entirely fictional story," two of its protagonists present familiar profiles: a self-reliant craftsman who makes artful wood vessels, and a gallery manager who writes on the side. Many of the characters are

alumni of an ashram waging war against a corporate conspiracy to destroy religion and critical thinking. At stake is The Turning, a restoration of the cosmic balance under assault. Subliminal sprites named Gelkandars figure prominently in the story, as do callow youth seeking rock and roll fame. Multiple plot lines kick off the story but eventually overlap and resolve in a climactic battle. Key scenes play out in Binh's exhibited artwork, deciphered in adjacent signage.

Ambition and outcome

Shadow of the Turning stands as a grand experiment that proudly advertises its ambition. Neither its stated purpose nor its execution is modest, and for some of us, gauging its level of success

seems as complex as the project itself. As I sorted my own reactions to both the exhibition and publications, I asked show-goers and a few professional artists and writers who had seen one of the catalogs what they thought of it all. Responses varied widely: "beautiful" (new museum member), "glorious excess...worlds within worlds" (retired art college professor), "over the top...liked the monochromatic pieces more" (painter), "too much going on...[but] I liked some of the cartoon effects" (painter/cartoonist), "amazing" (graphic designer), and "neo-baroque...I'm fond of the lime-green glass and double vessels" (curator). Perhaps the most enthusiastic comment came from a museum guard: "My favorite show...I'm going to miss ▶

it when it's gone...I read the book and really liked the story."

My own response to the show and books was mixed. I had read both volumes before visiting the exhibition and was eager to see Binh's work firsthand after reading his compelling biography and viewing his archive-quality photography. Kevin deserves enormous credit for digging deep within Binh's memory and the Vietnam War era and pulling together a sweeping, nuanced story of Binh's war-torn years in *River of Destiny*. His occasional commentary on artworks in the text seemed disruptive at first, but it served a useful purpose in what was, after all, an exhibition catalog. While the writing was outstanding, I was struck by a haunting absence: Where were the story's violence and despair among the serene vessels on display? How many viewers unexposed to the book would have a clue about the content of the artwork?

Kevin did briefly address the matter in *River of Destiny* by observing that for Binh, "sharing...[traumatic] experience through art offers more than catharsis, but also a means of reframing these memories through objects

of beauty." The reframing, however, placed the emotional import of his artwork beyond most, if not all, viewers—hence the need for decoding the personalized motifs and colors in a book. Yes, the uninformed public could still appreciate the beauty and craftsmanship of the objects, but the disconnect between their appearance and meaning persisted in my mind.

In Shadow of the Turning, the explanation of content had moved from the catalog to the exhibition signage. The book seemed designed to play a more oblique role. While the artwork was intended to illustrate the story, the joint project may have also been conceived to work in reverse: The novel could provide a revealing backdrop that infused the illustrations with significance without making didactic references to them. No doubt this happened among story readers, although a didactic tone crept in here and there in the book where the narrator restated what was obvious in the dialogue or scene descriptions. In the end, an abundance of telling and an insufficiency of showing tended to undercut both the immediacy of the artwork and the credibility of the fantasy.

Content and meaning aside, did the art stand on its own visually? For me, the architectural features towering profiles, staggered rims and panels, and fine grillwork gave Binh's pieces stunning depth and presence. I couldn't help but wish these features had remained primary. Imagery and color, however, took over in many works. In moderation, these additional elements could have enhanced the magic, but in profusion they sometimes shattered the spell of tranquility cast by the forms. The collaborations with other visual artists, moreover, fed the plethora of embellishment in a number of instances. (Graeme Priddle's contribution in Returning Eternal to Being, however, stood out as a refreshing example of "Less is more.")

Sensory overload has become ubiquitous in today's art and entertainment industry, frequently making it hard to distinguish signal from noise. The best way to imbue art with power, however, may not be to maximize imagery and color, but to give breathing room to a limited selection of each. Fortunately, gainful restraint



could still be found in the exhibition. The assemblage *Lilac Moon*, for instance, exuded quiet potency, with fret-worked lavender and blue vessels and panels set against dark wood. It was among the pieces I could easily imagine taking home.

Despite my reservations about *Shadow of the Turning*, I have no

regrets about reading the books or traveling a thousand miles to see the exhibition. Those of you who missed it will have other opportunities when it moves in October to the Center for Art in Wood in Philadelphia and to other venues afterward. I guarantee you will experience a spectacle.

David Fry turns wood and writes near Washington, D.C.

River of Destiny: The Life and Work of Binh Pho (2006, 152 pp., Hardcover, \$50; Softcover, \$35) and Shadow of the Turning (2012, 264 pp., Hardcover, \$59.95; Softcover, \$39.95). Distributed by Fine Arts Press, fineartspress.com.



Lilac Moon, 2009, Wenge, aluminum, glass, gold leaf, acrylic paint, $15" \times 15" \times 4"$ (38cm \times 38cm \times 10cm) Collection of Mark Alan Greenberger

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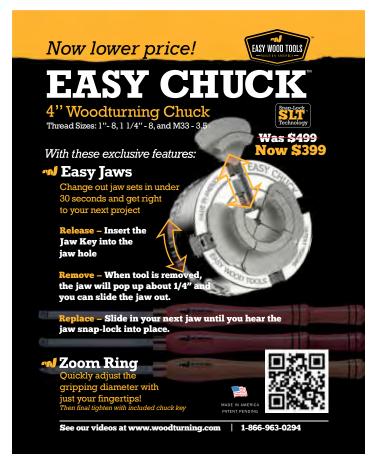
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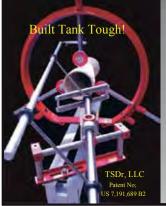
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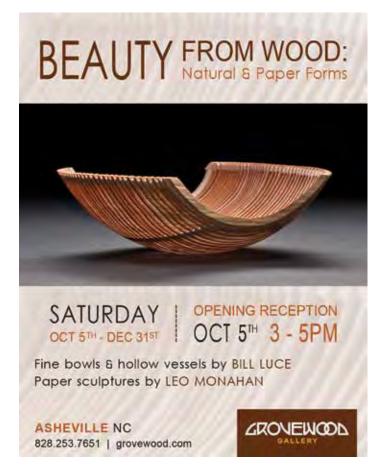
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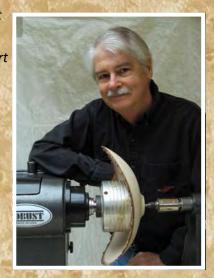




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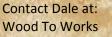
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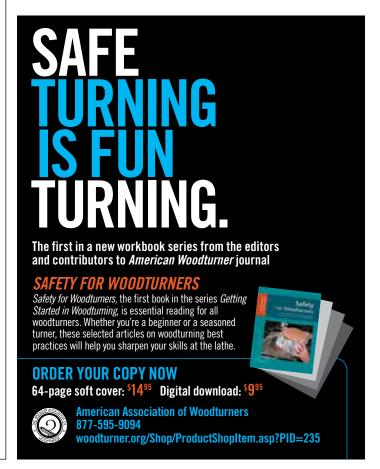
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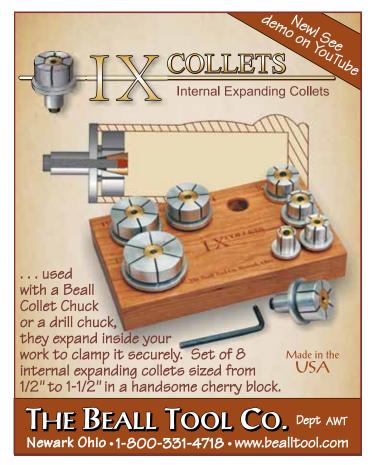
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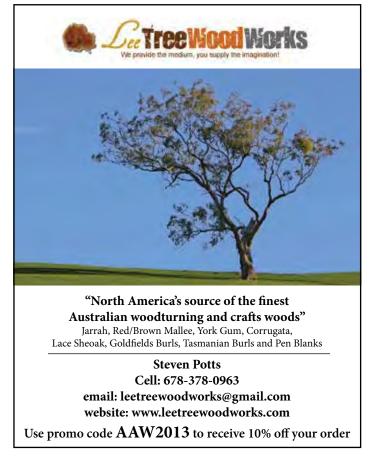














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PAUL HEDMAN

I had the immense fortune to meet and spend time with Claude Letheicq at the AAW symposium in Saint Paul. Ever since, I have had the urge to try my spin on Chinese balls. *Chinese Moon II* is my second attempt. It has three layers and I left small areas where the layers are connected. The holes are not arranged in the conventional manner, rather I aimed for random spacing and size to leave precision out of the process. The work done on the first two "moons" gives me even more ideas to try.

