Lidded Box • SketchUp • The Lipton Collection

AMERICAN WOODTURNER

Journal of the American Association of Woodturners

Kinetics in Woodturning

Shrink Box

Symposium Preview

Tool Handles

Stabile #12, 2011, Cocobolo, industrial felt, lead, stainless steel, 39" × 27" (99 cm × 69 cm)

Robert Arnold
Stabiles

Constantin Brancusi's *Bird in Space* inspired my first stabiles. I have always been fascinated by this sculpture, and I wanted to develop something so simple and elegant into a kinetic sculpture. I am also a great admirer of the work of Alexander Calder and George Rickey.

As I became more proficient in woodturning and hollow forms, multiaxis turning, and vessels, I kept thinking about the fundamental nature of spindle turning and I developed an appreciation for the basic skills it takes to work with spindles. These thoughts led me to begin working on stabiles.

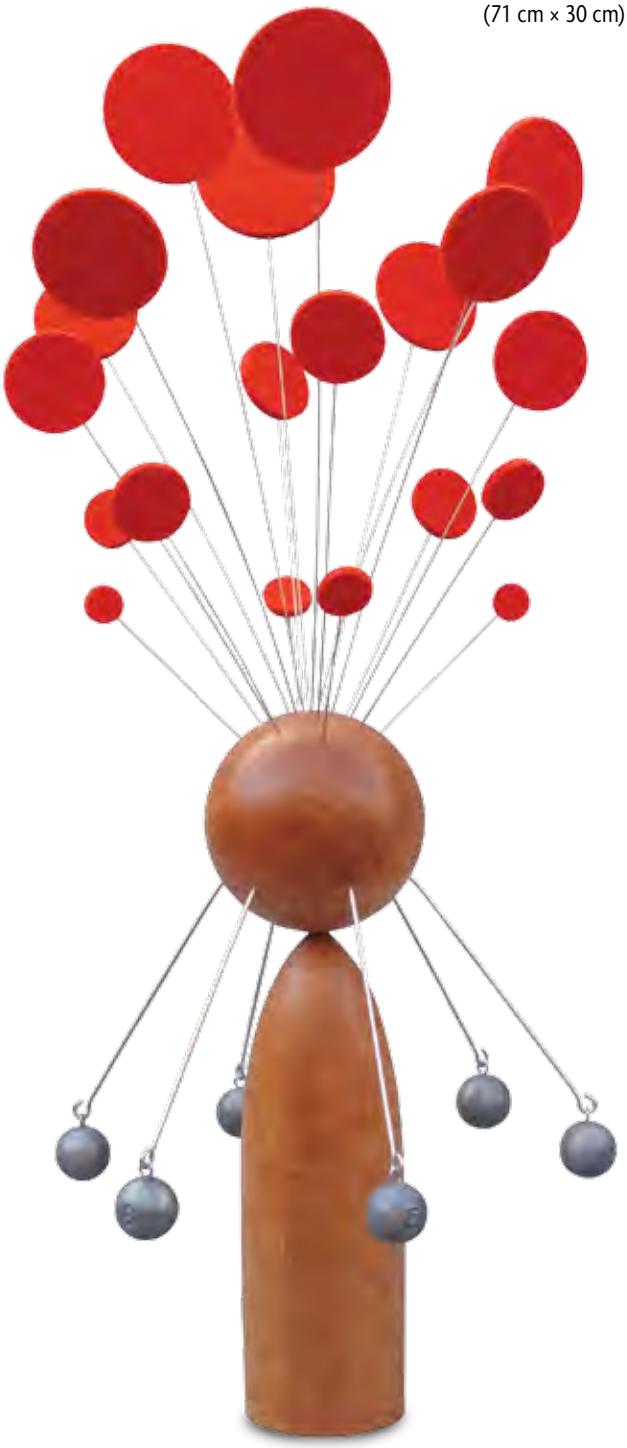
When balancing the stabiles, especially those with the sphere on top, my first attempts were an exercise in trial-and-error. I did some research and spoke to physicists and structural engineers to learn the basics of center-of-balance, center-of-mass, and statics, and to acquire information for balancing stabiles on multiple axes. All of the stabiles are balanced so that they move vertically, as well as rotate completely around the balance point.

—Robert Arnold

You can see more of Robert's work on his website, thedoghouseworkshop.com

Stabile #7, 2011, Padauk, test tubes, lead, stainless steel, 14" × 9" (36 cm × 23 cm)

Stabile #10, 2011, Cherry, industrial felt, lead, stainless steel, 28" × 12" (71 cm × 30 cm)



Stabile #3, 2011, Cocobolo, ash, lead, bronze, 24" × 16" (61 cm × 41 cm)

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

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Cover – Peter Rand, *Pas de Deux*, 2011, Walnut, aluminum, 4" (10 cm) dia.

Back Cover – Jim Sannerud, *Bowl Stack*, 2011, Birch, milk paint, organic linseed oil, 3½" × 13" (9 cm × 33 cm) (bottom bowl), 1¾" × 4" (4 cm × 10 cm) (top bowl) Photo: Tib Shaw

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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

As I begin my fourth year editing *AW*, I note a continually increasing interest in surface embellishment on turned objects. Embellishing wood is not new, of course—woodworkers have been carving, texturing, and coloring for ages. The increasing interest has to do with turners who have made hundreds of bowls and are now looking for new techniques to pique their interest. Wally Dickerman, a consummate turner and now 90 years old, is beginning to explore piercing. There is movement.

The techniques and processes of woodturning have to do with movement: The lathe spins wood and shavings fly when we move our tools across the wood's surface. I had not thought to extend that movement beyond the making, but Peter Rand's article on kinetics—real movement in woodturning—discusses another element that woodturning can encompass. Peter's playful sculptures don't stand still, even *after* they leave the lathe.

I frequent AAW's website to look at the creations posted by members and came across Robert Arnold's stabiles, just the sort of objects to accompany Peter's article on movement. Robert's mobiles are lively, almost bouncing off the pages. What fun he must be having!

Within this journal, there will always be a balance of traditional turning, basic techniques, and cutting-edge creations. This issue's offerings run the gamut from Bill Neddow's article on tool handles to David Fry's review of Kevin Wallace's new book on the Lipton Collection. As we move through this year, I look forward to presenting within each issue something for everyone in our ever-expanding, growing organization.

—Betty Scarpino

President's Letter

Turning the Page

What does the AAW offer? For newer members, I suspect that receiving the *American Woodturner* six times a year is their main benefit. For the 50 percent of our members who have attended an annual symposium, that event is significant. For those who have garnered an Educational Opportunity Grant (EOG) or financed equipment for their chapter, those are huge assets. For all the youth who have taken classes at the annual symposium, hundreds have gone home with heads full of ideas and hands carrying lathes and tools. For me, the main benefit has been the friends I have met through the AAW, allowing me to travel across the United States and to four foreign countries, turning bowls and teaching.

We can be proud of many accomplishments. Our 25th anniversary symposium attracted more than 1,700 attendees, as well as many Honorary Lifetime Members. Our professionally edited journal offers articles designed to appeal to turners at every skill level. We distribute thousands of dollars in EOG grants—funded through auctions and our endowment—that bring direct benefits to local chapters, schools, and members. We now have more than 350 chapters. I thank those pioneer members who had the vision and drive to create the AAW.

We are an association of like-minded members who share an interest in woodturning. Many of us volunteer our time. Yes, we have paid staff who work hard year-round, but most of the committee and symposium work is done by member volunteers. The members from four chapters in the San José area are already hard at work to make that symposium a great event.

Because we depend on volunteers, I appeal to all AAW members to donate their time and talents. Offer to be an officer in your local chapter. Demonstrate for your chapter or at a neighborhood craft show, or organize woodturning displays in libraries, hospitals, or airports. Help set up the demonstration room for your monthly meetings—and help clean up afterward. Operate the video camera or run the monthly raffle. My chapter and many others have "sawduster" skill-enhancement sessions where newer members get hands-on help. Yet other members help run classes at local high schools.

Based on my years with the AAW, I guarantee that the more you volunteer the more you will get out of woodturning. You will get to work with talented hobbyist turners and gifted professionals. And, by helping a new turner learn the craft, you will become a better turner yourself.

The AAW Board's focus is on providing tangible benefits to our members. We try to have a Board representative at most of the regional symposiums. When you see a Board member, please take the time to share with him or her what you want from the AAW. Let us know your thoughts by email or phone. This is your chance to influence the future of the AAW.

Let me close by deeply thanking Tom Wirsing for serving as AAW's Board President. Tom dedicated untold hours and much travel in carrying out AAW's mission. He has two more years to serve on the Board and will work on the San José symposium. Thank you, Tom, from all of us.

With best regards,

Dale Larson

Dale Larson

Join us in San José for AAW's 26th Annual Symposium

San José, California, June 8–10, 2012

Save the date and don't miss the 2012 symposium in San José, California, at the McEnery Convention Center (sanjose.org/plan-a-meeting-event/venues/convention-center). San José International Airport is only 15 minutes from the Convention Center and hotels. Our world-class lineup of demonstrators and events promises excitement and learning for all. The spouse craft room with its separate list of demonstrations expands each year, as do the tours for family members. Make this event a destination for your family vacation!

While in town, take in the Community Forest of San José, estimated to contain more than 1 million trees on private and public property (sanjoseca.gov/tree/trees_heritage.asp). A wide variety of tree species provides great beauty, shade, and environmental benefits to Santa Clara Valley. You might want to also visit Plaza de César Chávez, Cathedral Basilica of St. Joseph, The Tech Museum, and Winchester Mystery House.

In addition to the largest Instant Gallery of turned objects under one roof, the symposium will feature three exhibits, "A Walk in the Woods," and the Professional Outreach Program's "Beyond Containment" and "Richard Raffan, Merit Award" exhibits. The Collectors of Wood Art (CWA) will sponsor a panel discussion and a session at the Special Interest Night on Friday.

AAW's Return to the Community fundraiser will be "Empty Bowls," which is perfect for AAW's membership to help end hunger in the communities where our annual symposium is held. What could be better—woodturners making, donating, and purchasing bowls, all for a good cause!

Registration information is online at woodturner.org. A list of selected demonstrators will appear in the April issue of *American Woodturner.* ■

Accommodations

Symposium rates are effective from June 4–12.

San José Marriott: 301 S Market St
marriott.com/hotels/travel/sjcsj-san-jose-marriott/, 408-280-1300, $129

Hilton San José: 300 Almaden Blvd
tinyurl.com/7r68zkz
408-287-2100, $129

Hyatt Place: 282 Almaden Blvd
cpsanjose.com, 408-998-0400, $125

Featured Demonstrators

Eli Avisera, Israel

▸ **Special Equipment *Not* Needed**

Join Jean-François Escoulen and me for a special demonstration on the use of the skew chisel and bedan for turning different projects.

▸ **Inlay for Turning Projects**

Learn how to use inlay techniques to create bowls, boxes, and dreidels.

▸ **Turn a Bowl**

Learn carving and texturing techniques for materials such as Jerusalem stone for a 21" (53 cm) diameter bowl. Includes carving and coloring.

▸ **Decoration Technique for Off-Center Turnings**

I will demonstrate how to create a unique box, a square bowl, and a dreidel using coloring and decoration on turned elements.

▸ **Spindle**

Using candlesticks as an example, I will show carving techniques, texturing, and coloring.

Untitled, 2010, Maple, ebony, 2" × 5" (5 cm × 13 cm)

Jerry Bennett, Texas

Jerry has been an artist much of his life and an avid woodturner since 2001. He is a student of other crafts and is particularly influenced by the flowing lines of glass. By using segmented turning and traditional sculptural methods, he brings an unexpected fluidity to his work. His art is somewhat abstract but unapologetically representative. His classes are designed to provide a basic understanding of how his sculptures are created and the tools and jigs required to make them.

Fire on the Mountain, 2011, Mahogany, ebony, maple, steel, aniline dye, acrylics, 53" × 35" × 17" (135 cm × 89 cm × 43 cm)
Photo: Peggy Bennett

▸ **Why Not Scribble in Wood?**

If you can scribble, then why not scribble in wood? I will cover the process I use to make my fun, animated, stringed musical pieces or anything "scribbly." This slideshow presentation will include making a steel armature, turning and shaping the segmented layers, and designing terrific bases for your work. We may also talk a little bit about art along the way.

continued

26th Annual AAW Symposium in San José

(Jerry Bennett continued)

▸ **Open-Aligned Vessels**

Many of us have turned open-segmented vessels and bowls. Have you ever considered aligning all of the segments instead of staggering them? Using photos, I will show how to make the most interesting open-segmented vessels. I will cover design, the cutting of segments, turning, carving, finishing, and final assembly of these fun pieces. The possibilities are endless.

▸ **Open-Aligned Vessels on Steroids**

I will take my open-aligned process a bit further by introducing a wavy ribbon-like shape to the vessel and perhaps a little twist. We are going to throw caution to the wind and cover the design process, turning, carving, and assembly of the all-new, *Table Christmas Ornament*. I will also peek into the future of this versatile art form.

Jean-François Escoulen, France

▸ **Creative Use of an Eccentric Chuck**

My specialty is eccentric turning. I have invented a special technique that is exceptional because the axis of rotation can be easily tilted for turning. With my technique, you can create turned forms you never dreamed possible. I use two different chucks and am able to connect both to create crazy pieces. I will show how to turn a beautiful *trembleur*, long and thin, using a string steady rest.

▸ **Make a String Steady Rest**

Trembleurs (long thin spindles) are an old French technique and are a challenge to make. The long piece is only 2 mm (1/16") at the smallest diameter and 40 mm (1½") at the largest diameter. The trembleur is a good tutorial for practicing turning of traditional shapes that have fine details.

▸ **Multiaxis Turning**

Multiaxis turning is a straightforward technique used to turn creative pieces with the lathe. By simply moving the axes of the piece of wood, unusual designs can be created.

▸ **Special Equipment *Not* Needed**

Eli Avisera and I will demonstrate the proper uses of the spindle gouge that has two bevels, as well as the *bedan*, an unusual tool that is useful for creating fine detail on spindles.

Balloons, 2010, Masur birch, ebony, 30" (75 cm) tall
Photo: Yves Duble

Ron Gerton, Washington

▸ **Turn with a Strobe Light**

Revisit a technique that has been around for more than 20 years. Come see spinning wood appear to be standing still while wood chips fly. Grain patterns emerge, a natural-edge bowl takes shape, and defects are easily seen. Starting a cut on irregular pieces of wood is safe when you can see exactly where the irregularities are as your tool approaches the wood. I will show a strobe light in use and discuss precautions and equipment needed.

▸ **Spin the Wood Slow, Speed up the Cutter: Routers and Lathes**

Turning large or marginal wood can be dangerous. Some of the prettiest wood is often spalted, has dry rot, or may have hidden cracks or weak spots. An alternative for dealing with challenging woods is to turn slowly and use a router to cut cleanly and safely. The router allows cutting precise shapes in highly figured wood without chipping or tear-out. I will describe how to safely mount a router to your lathe and how to use it.

Pas de deux, 1999, Manzanita, bronze, 18" × 14" × 11" (46 cm × 36 cm × 28 cm)

J. Paul Fennell, Arizona

▸ **Personal Innovations I: Shopmade Tools and Jigs**

During my 40-plus years of woodturning, I have developed innovative tools for creating and decorating hollow forms. These include specially designed handles for hollowing tools, a versatile scraper, calipers for gauging wall thickness, adaptations of nonturning tools to use for decorating surfaces, and indexing templates for creating straight and contoured divisions on vessels. Most are easily made in your shop. I will describe these tools in detail with slide presentations, and will demonstrate how each is used.

▸ **Personal Innovations II: Hollow Form Techniques**

Learn how I make a hollow form using my shopmade tools and the specialized techniques I have developed. I will show how hollowing tools of different sizes can be made to effectively use the best tool for the size of the vessel being made. I will demonstrate how turning in reverse is more comfortable.

Using fiber optics as an "optical caliper" allows great control in achieving uniform wall thickness for thin or thick vessels that will be carved. Other specialized calipers will be shown to provide an accurate gauging of wall thickness. Controlling wood distortion and techniques to minimize sanding will be discussed.

▸ **Personal Innovations III: Decorative Techniques and Design**

Learn about surface-decoration techniques to create work that is expressive and personal. See how to carve/pierce design elements at different surface levels. Topics include creative indexing as a starting point for design possibilities, using the computer to modify designs, applying designs using frisket as the transfer medium, and using unconventional tools for texturing vessel surfaces.

Lattice in the Clouds II, 2011, Mesquite, 10" × 8" (25 cm × 20 cm)

June 8–10, 2012

Mike Jackofsky, California

Hand-Held Hollowing Tools

A clear view of the cutting action of hollowing tools is possible using an open bowl. Take a look inside the hollowing process, which is not possible when hollowing a closed vessel. There is no time wasted removing shavings through a small opening, allowing for more discussion of tools and techniques. Emphasis will be on demonstrating the skills necessary to effectively control hand-held hollowing tools: balanced stance and holding the tools in a way that minimizes the effort required to produce controlled cuts, resulting in a clean, smooth surface, inside and out.

Getting Started: Hollowing for Beginners

Untitled, 2009, Mesquite, 9" × 8" (23 cm × 20 cm)

Set yourself up for success by learning how to control the factors that can make the hollowing process difficult. Find out which shapes and forms allow for an excellent chance of success, especially as a beginner. Explore the relationships among size, shape, wall thickness, size of opening, natural edges, and the type and weight of the wood. Included will be how to create a form that can be hollowed with just a straight tool. Keep it simple and basic!

Creating Hollow Vessels

A fun and fast-paced demonstration will reveal the complete hollowing process: from safely and efficiently creating a shape between centers and mounting it securely in a chuck, to hollowing the piece and rechucking to complete the bottom. I will provide an overview of the entire process with emphasis on form, efficiency, and safety, using both straight and bent tools.

Natural-Edge Hollow Vessels

This exploration of an advanced hollowing project involves working with burl to make a natural-edge hollow vessel. Emphasized will be the characteristics and differences in working with burls, such as dealing with bark inclusions, voids, and other defects to create a finished piece.

Lyle Jamieson, Michigan

Foundations of Bowl Turning

I will use the bowl format to demonstrate the foundation elements of turning. Focus will be on bowl-gouge tool control methods, sharpening, chucking methods, preventing catches, and reverse-chucking techniques. Learn how to start sanding with 320- to 220-grit abrasive on the outside of bowls.

Celebration, 2004, Chinese elm, 25" × 13" × 10" (64 cm × 33 cm × 25 cm)
Photo: Don Rutt
Collection of Alan Cole

Foundations of Hollow-Form Turning

Join me while I demonstrate the fundamentals of hollow-form turning. I will concentrate on tool control, chucking issues, support problems, vibration, grain orientation, hollowing in stages, and laser-measuring techniques. I will share techniques for both outside and inside of hollow-form turning.

Thin-Walled Goblet

Goblets are an excellent form to demonstrate hollow forms that have a very thin wall. I will concentrate on laser-measuring techniques, minimizing the use of steady rests, hollowing in stages, and carbide-cutter methods.

Advanced Hollow-Form Techniques

You can successfully troubleshoot problems and remove obstacles when turning hollow forms. Learn how to skillfully enter small-mouth openings, deal with voids, work with natural edges, achieve uniformly thin walls with laser measuring, and avoid vibration. Design elements affect hollowing techniques, and I will share with you the designs that work best.

Mike Lee, Hawaii

Multiaxis Sculpting Using the Lathe

Join me in this demonstration on using the lathe as a sculpting tool. I will discuss using multiple axes to design and create vessels that have three different axes. The use of hollowing tools and techniques for hollowing will be demonstrated.

Family Jewels, 2008, Yellowheart, Gabon ebony, cocobolo, lignum vitae, tulipwood, 3½" × 7" × 6" (9 cm × 18 cm × 15 cm)

Panel Discussion, Personal Style

This POP rotation features David Ellsworth, Jerry Bennett, and me for lively sharing of individual approaches to creating a distinctive body of work. Open to all attendees. Bring your questions and comments and join in the discussion.

Carving and Texturing

Much of my work involves carving and texturing, and painting off the lathe. I will discuss the use of burs and power carvers to work on a piece after it has been turned. I will introduce attendees to painting with milk paint. A short slideshow will be given.

Bill Luce, Washington

Strategies in the Pursuit of Form

Good form is the foundation of all excellence, and it is up to each of us to find ways to best advance our own sensitivity to form. In this fast-paced presentation I will discuss the strategies I have found useful in my own pursuit of powerful form.

Untitled, 2011, Douglas fir, pigment, 6" × 6⅞" (15 cm × 17 cm)

The Round-Bottom Bowl

The round-bottom bowl is the most versatile of all turned vessel shapes. Without a flat base or foot imposing itself, the round-bottomed bowl can range from elegant to organic, functional to delicate. I will discuss this bowl form, from design and aesthetic considerations, to the types of tool-edge grinds I find useful, to other technical tips such as options for rechucking to turn the bottom. Round-bottom bowls rock!

continued

26th Annual AAW Symposium in San José

(Bill Luce continued)

▸ Bowl-Turning Tips

I will discuss and demonstrate a range of tips and techniques on the subject of bowl turning: fast, efficient roughing; useful gouge grinds; green-turning considerations; chucking techniques; vacuum chucking; boiling; alcohol soaking; and specific tips on how to help get the gouge to create the shape you have in your mind.

William Moore, Oregon

▸ Get Started in Metal Spinning

Join me for an introduction to the basic tools, techniques, and materials of metal spinning. I will explain and demonstrate how to use a lathe and disks of metal to create metal forms.

Intertwined, 2011, Mahogany, copper, 11¼" × 15¾" × 13½" (29 cm × 40 cm × 34 cm)
Photo: Dan Kvitka

▸ Designing with Spun Metal and Turned Wood

In this slide talk, I will discuss the ideas and design issues I have explored when combining spun metal and turned wood. The images will illustrate the variety of ways that the simple forms of spun metal can be combined to create more complex forms. The work slides will illustrate the variety of patinas that can be used to color the metal.

Stuart Mortimer, England

▸ Introduction to the Basic Spiral

Learn all of the tools, layouts, and cutting techniques for making a spiral as I cut a double twist on a spindle. I will then open that spindle to the more dramatic open double twist. I will cut a goblet with a triple (three-start) twist, and then cut a laminated stem with a four-start twist.

▸ Two Versions of Twisting Hollow Forms

I will begin with a 12-bine twisted hollow form cut from a 5" (13 cm) block using the professional Arbortech. I will turn a small hollow form, using a mix of traditional and modern tools.

Untitled, 2009, African blackwood, pink ivory, 7½" (19 cm) high

▸ Standard Hollow Form and Finials

Join me to learn how to make a standard hollow form turned from wet maple or sycamore. There will be time to cut both an open four-start twisted finial and a finial with a pigtail twist.

▸ Thin-Cut Vase with Rim Twist and Bun Twist

I will turn a vase form and friction-dry it to a translucent stage, with a rim twist on the rim and a bun twist at the base.

Joey Richardson, England

▸ Airbrushing and Design

My excitement and fulfillment comes from creating unique pieces. I will talk about different aspects of design and how to develop individual work. I show the progression of my floral forms, including how I use color to capture the mood and story. I will demonstrate many techniques of airbrushing, including preparation, masking, and how to transfer images. I use interference, transparent and opaque paints, as well as show tools, materials, and finishes.

Free One, 2011, Sycamore, walnut burl, acrylic colors, 6" × 6" (15 cm × 15 cm)

▸ Piercing and Texturing Techniques

Learn the techniques and designs for piercing turned forms using an ultra-high-speed dental drill. I show how to pierce images into turned forms and how to finish and use interference colors on piercing. Using 3D crystal-color lacquer, I demonstrate the method of filling the pierced holes to give a stunning effect. I also demonstrate a power-carving tool and a pyrography machine, giving lots of ideas and inspiration on how to make your utility bowls and platters your own designs.

Richard Raffan, Australia

My demonstrations focus on tool, chucking, and design techniques that can help turners work smarter, allowing more time to concentrate on what they're making.

▸ Endgrain Box

You will see how I turn an endgrain box with a suction-fit lid and I will explain exactly what is going on, and why, as work proceeds.

▸ Cross-Grain Box

This project shows a wide range of techniques for facework. I will present a range of chucking options using dovetail jaws and demonstrate a wide range of scraper and gouge techniques.

▸ Bowls

I will be turning open and enclosed bowls and pots using mostly standard gouges and scrapers. Finished bowls will be taken straight from a variety of dovetail jaws.

Salad bowl, 2007, Oak, 6" × 13" (15 cm × 33 cm)

Curt Theobald, Wyoming

▸ Segmenting: Where Do You Start?

There is more to segmented turning than gluing pieces of wood together and turning a bowl. This demonstration, geared to all skill levels, will help you learn where to begin or how to refine your current skills. I will discuss wood choices, wood movement, planning, design considerations, and material preparation to help you better understand how to create successful segmented projects.

Cool Blue Wave, 2011, Apricot, glass, 6" × 2¼" × 3" (15 cm × 6 cm × 8 cm)

(Curt Theobald continued)

▸ **Anatomy of a Segmented Pattern**

Don't let the apparent complexity of a segmented pattern intimidate you. Attendees will learn how to accurately plan their own projects and begin to foresee potential problems before any wood is cut. I will show how to create patterns that can be used to enhance segmented woodturnings. Many methods will be shared to help attendees more easily and accurately perform segmented-pattern glue-ups, in addition to learning timesaving techniques.

▸ **Pushing Your Work to the Next Level**

This PowerPoint presentation will show fifteen years of my segmented works. I will critique my segmented works and explain positive and negative aspects of each piece. We will discuss the thought process of how to make your work more creative and push your skills to the next level. Attendees will be challenged to improve their own turnings through the process of seeing how my work has evolved with each successive piece in a series and as an overall body of turnings.

▸ **Thinking Outside the Box**

It can be difficult to design segmented turnings that stand out from others. This session, which is beneficial to segmented and nonsegmented turners, will challenge attendees to think differently about the creation of their work. We will take a step-by-step look at a sculptural piece and discuss the steps I pursued to make my vision a reality. Some of the topics are: inspiration, evolution of design, problem solving, prototyping, and creation of the piece.

▸ **Segmenting Stone**

There is an endless variety of stone that can be used to create interesting segmented turnings. I will present techniques necessary to work with alabaster, soapstone, pyrophyllite, and calcite. Come to this session to learn where to begin.

Jacques Vesery, Maine

▸ **Everything You Wanted to Know About Color But Were Afraid to Ask**

Join me for an in-depth discussion of how to mix colors, when and when not to use color, and appropriate mediums for use on wood. I will take the scary out of shading and the tension out of toning through use of acrylics.

▸ **Form Trumps Pretty Wood: Concepts in Design and Form**

Technique is often a distraction to the importance of good form. Trying to find methods to create better form can be a difficult step in moving our work to the next level. I will demonstrate design elements, including scale, form, balance, and proportions, the golden mean, and geometry of design as visualized through the turning process. Think of it as sketching in 3D. The session will end with a critique of forms created during the rotation. This is a great learning tool for anyone working in any medium that is in pursuit of better form.

▸ **Inspiration, Challenge, and Evolution: Works by J. Vesery**

This image presentation and discussion will focus on the inspirations I've had and challenges I have confronted over the years and how my work evolves because of those demands. Past, present, and future work, plus collaborations, will be included. ■

Makana Ka Na Hoku (Gift of the Stars), 2006-07, Cherry, 23 kt gold leaf, acrylic, 2½" × 5" (6 cm × 13 cm)

Collection of Jeffrey Bernstein and Judith Chernoff

AAW Forum Contest Winners

The challenge for the last AAW Forum contest was hollow vessels. The rules stated: Entries cannot exceed 6" (15 cm) in any direction. The emphasis is on the form and use of materials to complement the form.

Thank you to Keith Burns, who juried the entries, and to everyone who entered the contest. Congratulations to the winners! To enter the next contest, view all the entries, and read the judge's comments, visit the Forum section of the AAW website at woodturner.org. ■

—Kurt Bird, AAW Forums Moderator

First Place
Robert Lane, Germany

Untitled, 2010, Cherry burl, ebony, blown glass, 4" × 4½" (10 cm × 11 cm)

Second Place
Richard Kennedy, England

Plan B, 2011, Elm, 3½" × 2¼" (9 cm × 6 cm)

Third Place Scott Paris, Virginia

Untitled, 2011, Cast polyester resin, ebony, 3½" × 2" (9 cm × 5 cm)

A Walk in the Woods

AAW's 2012 Exhibit Application Guidelines

"A Walk in the Woods" is the title and theme for the AAW's annual juried exhibit, premiering at the 26th annual international symposium in San José, CA. Open to any current AAW member, this year's theme honors the many parks and forests in California.

Application information

- Application deadline is February 12.
- Entry fee is $30.
- Applicants will be notified no later than April 30.
- A 45 percent commission will be taken on sales made at any of the exhibition venues. Sold work will remain within the exhibit until its conclusion.
- A link to the online application form can be found at woodturner.org/gallery/walkinthewoods.

Chapter Collaborative Challenge 2012

For the 2012 AAW 26th annual international symposium in San José, CA, the chapters and membership committee will again sponsor a Chapter Collaborative Challenge (C3).

Each AAW chapter is encouraged to submit one collaborative work created by as many chapter members as possible, with a minimum of six participants. Please refer to page 13 in the October 2011 issue of the journal for rules and guidelines.

Local Chapter Contact Information

Has there been a change in your local chapter information? If so, please let a staff person at the AAW headquarters know. It's easy, just call us at 651-484-9094 (toll free at 877-595-9094) or send an email to info@woodturner.org. Please help us keep our records current by providing:

- Names of the current president and board members
- When and where meetings are held
- Number of members in your club

If you have questions or concerns that the staff in Saint Paul can help you with, please let us know. Thank you!
—Linda Ferber, Program Director

Prize Drawing for AAW Members

One of the many benefits of membership in the AAW is our monthly prize and year-end grand prize drawings. Thank you to the vendors that donated this year's prizes, which include tuition scholarships, $100 certificates, sanding supplies, DVDs, chucks, grinding jigs, and lathes!

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 2012, 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.

2012 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

Oneway Manufacturing, oneway.ca

Thompson Lathe Tools, thompsonlathetools.com

Totally Turning/Showcase Symposium, totallyturning.com

Trent Bosch, trentbosch.com

Walter Meier Inc. Powermatic/JET powermatic.com and jettools.com

Woodturning Design magazine, woodturningdesign.com

Contests

Best Chapter Newsletter/ Best Chapter Website

Each year, the AAW holds two contests: Best Chapter Newsletter and Best Chapter Website. The closing date for applications is April 1. Winners will be announced in mid-May on AAW's website and at the symposium banquet in San José; there will be a follow-up announcement in the journal.

Rules and guidelines and links to winners' newsletters and websites may be found on the AAW website at woodturner.org/community/chapters/chapter_contests_2012.htm.

How to apply

Best Chapter Newsletter

Email a *link only* to your four best newsletters from the past year, to inquiries@woodturner.org. Do *not* send any of the four newsletters themselves; the file sizes will overwhelm the judges' inboxes!

The 2011 newsletter winners were Mid-South Woodturners Guild, Mike Maffitt, editor; Woodturners Guild of Ontario, Peter K. Kaiser, editor; Tennessee Association of Woodturners, Randy Thompson, editor. Read their newsletters to get an idea of what it takes to put together an excellent newsletter.

Best Chapter Website

Email a link to your chapter's website, as well as the name and contact information for your webmaster, to webmaster@woodturner.org.

Winners of the 2011 contest were Central Indiana Chapter, James Purciful, webmaster; Mid-South Woodturners Guild, Mike Maffitt, webmaster; New Mexico Woodturners, Dave Stein, webmaster.

For both contests, the judges will be looking for:

- Visually appealing layout
- Current content
- Content that pertains to woodturning
- Content that contributes to AAW's mission statement
- Useful woodturning and news-related information
- Sound writing skills

Hall of Fame

The first-place winners of the chapter newsletter and website competitions have been inducted into AAW's Hall of Fame, prominently honored on our website. The chapters that have won a first place in either category will not compete in that competition in subsequent years.

Above all, newsletters and websites should be fun to read and provide useful information to members of the chapter they serve. ■

—Kurt Hertzog

AAW Board of Directors

Call for Nominees

The AAW offers much to its members and we are looking for a few good people who can contribute something in return. Do you have the time, energy, and ideas to be a part of the AAW operations, as well as a willingness to help make it a better organization? Be a part of moving the AAW forward—run for a position on the AAW Board!

The AAW elects a volunteer nine-member board to represent the membership and move the organization forward. If you have been a member in good standing for the past three years, you are eligible. The nominating committee will select the six best candidates. From these six, members will elect three candidates to serve a three-year term, beginning in January 2013.

For information on the duties of Board members, call any current board member or visit the AAW website at woodturner.org/info/bod/ for details. ■

If you are interested in serving on the board, please email the following to the executive director (cindy@woodturner.org), no later than May 1:

1. A statement of intent, including qualifications and reasons for applying.
2. Letters of recommendation from two individuals who can attest to your organizational and leadership abilities.
3. A high-resolution photograph of yourself.

The nominating committee will review application materials and schedule phone interviews in late May and early June. Candidates will be presented in the journal, ballots will be sent out in the fall, and election results will be announced in late 2012.

Tips

Moving a heavy tailstock

The tailstock on my lathe is heavy. Here is my solution for ease of installing and removing the tailstock. I purchased a three-drawer storage unit on wheels from a local home improvement center. I fabricated a tabletop of melamine-clad MDF, cut to the configuration of the bed rails of my lathe and set it on the top shelf of the storage unit, lining it up to be as close to the bed-rail height as possible. I turned dowels to fit into the bed of the lathe to accurately align the storage unit with the lathe bed. From the melamine-clad MDF, I fabricated an angled tool rack that will hold a variety of tools. The total cash outlay was about $50, and I have additional storage.

—Ken Haines, California

Tool handles for drill chucks

What do you do with a pair of Jacobs chucks that are beyond repair? I made tool handles. I use the chucks to hold drill bits for when I drill a depth hole in a bowl blank. Another use is to hold small carbide cutters for hollowing small items.

—John Kaner, Alaska

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

Hose magnet

I have a flexible hose attached to my dust collector so that I can direct the hose where it is most effective. To help keep it in place, I tied a large donut-shaped magnet to the end of the hose. Now I can easily attach the hose to any part of the lathe when sanding or to any other tool that is producing dust. When not in use, the magnet helps keep the hose out of the way.

—Mary Carol Meinken, Ohio

Turning bowl bottoms

To finish the bottoms of my bowls, I made a fixture that uses rings of plywood to hold a bowl onto a wooden faceplate. The wooden faceplate is drilled in three locations, 120° apart so that the rings can be bolted to the faceplate. I learned this technique from a previous issue of *AW*.

In this case, the bowl was too large to allow the ring to be bolted onto the faceplate, so I improvised. I used gorilla tape to hold the bowl onto the faceplate. To begin the cut, I used the tailstock for added support. When close to finishing the bottom, I removed the tailstock to turn and sand the middle.

The tape method also works without the plywood ring. Simply turn a small recess in the plywood faceplate to center the bowl into, tape the bowl onto the faceplate, use the tailstock for extra support, and turn and sand the bottom.

—Jim Mahoney, Florida

Accurate drilling depth

Some turning projects involve drilling stop holes (non-through holes) on a drill press. Some turners put masking tape on the drill bit to indicate the depth of drilling. If you have several objects of different depths to drill, you need a better solution than masking tape.

I learned this trick from a machinist.

1. Attach a steel ruler with a ⅜" (10 mm) dia. magnet to the drill press face vertically next to the depth gauge.
2. Lower the handle until the bit is flush with the surface of the stock *(Photo 1)*.
3. Adjust the height position of the ruler to align its zero mark (end of the ruler) with the depth-gauge pointer. This will align both the bit depth and the ruler to zero *(Photo 2)*.
4. Raise the handle and lower it to start drilling until the pointer points to the desired depth *(Photo 3)*.

—Charles Mak, Alberta


1


2


3

Storing finish: water and oil

I read with interest Robert Jay's tip on preserving unused finish (*AW* vol 26, no 4). I use a different method, told to me by David Ellsworth. Water is heavier than oil and does not mix with it. Simply pour water into the partially used oil finish container until there is virtually no room for air (oxygen). Without oxygen, the finish will be preserved.

I used one of my wife's spice jars (don't tell her) to illustrate the separation of a quantity of Watco dark oak oil finish and water. I took the photograph one minute after pouring water over the oil. The oil on the top is easily available for a brush or rag or to be poured out.

The oxygen dissolved in the water, about a thimble full per quart of water, is not readily available to the finish. I have used this method successfully with Watco finishes, tung oil, and Waterlox. Assuming that water is not very expensive in your area, this method is economical, as well as convenient.

—Denis Bourke, Maryland

Shopmade vacuum chucks

Oneway Mfg. sells Taper-Lock adaptors (available in numerous spindle-thread sizes) that screw onto the headstock to hold Oneway chucks. This adaptor is also useful as the base for a shopmade vacuum chuck.

The three vacuum chucks in the photo are all simple-turned wooden cylinders of differing diameters—I use them to support smaller pieces while I finish the bases. (The Oneway 3" [76 mm] aluminum drum chuck is shown for comparison.) The wooden cylinder fits snugly over the sleeve of the metal adaptor and is glued on with CA glue. Oneway sells a sticky-backed neoprene ring that is cut to size to fit the top end of the vacuum chuck where it contacts the piece. Their largest neoprene ring is 12" diameter and is 1¾" (44 mm) wide (Part 3662).

The accompanying photo shows one of these chucks being used to support a small vase form prior to turning away the tenon and finishing the base.

If you do not have a vacuum set-up, these shopmade chucks are useful as mandrels to support small pieces held at the tailstock end by a small residual stub, which is removed later with a carving tool.

—Malcolm Zander, Canada

Nor-Cal Woodturners Chapter Makes a Difference

Volunteers Teach Students an Artful Craft

The buzzing sound of electric lathes echoes off the walls of the industrial arts classroom at Leo A. Palmiter Jr./Sr. High School. Inside, students are taking scraps of discarded wood and creating keepsakes.

Students attending summer session are not only catching up on credits, but they are also learning a skill called woodturning, which is a form of woodworking. Members of the Nor-Cal Woodturners chapter are volunteering their time and equipment to teach students the craft. The volunteers provide the lathes, tools, and materials at no cost to the students. Much of the wood is scrap, some of it retrieved from landfills. "The kids love this but we also love it," said Ted Young, outreach chairman of the Nor-Cal Woodturners. "It's great to work with these young people and teach them this skill."

The volunteers have been working with Palmiter students every Friday in July as part of a special incentive program for students attending summer school. Students who perform well in school, are well behaved, and have good attendance, are allowed to participate in the woodturning class on Fridays. "These types of programs really keep our kids engaged. They're focused on making something with their own hands and they take pride in that," said Palmiter Principal Lauren Roth.

The program allows students to have contact with positive, enthusiastic mentors. The students benefit by acquiring new skills and interests that are useful beyond the classroom. Participating students have fun while learning. "This has just been awesome!" said Palmiter student James Allen. "We get to make cool things out of wood. I didn't know you could make pens out of wood!"

The students participating in the program attend Leo A. Palmiter Jr./Sr. High School. The school provides education to special needs students with the primary disability of Emotional Disturbance (ED) in grades 7–12. The students are referred directly from the local school districts of Sacramento County that are unable to provide the more highly structured behavioral support program available at Palmiter. Students are provided a standards-based educational program that is supported by a strong vocational/transitional/school-to-world emphasis.

Reprinted with permission from the Sacramento County Office of Education (SCOE) website.

The SCOE website describes the benefits provided by seventeen volunteers from Nor-Cal Woodturners of Sacramento, CA. This group reached out with their hearts, skills, and passion for their hobby to connect with students at the Leo A. Palmiter Jr./Sr. High School. The students loved the summer pilot program and wanted more. According to Principal Lauren Roth, this kind of activity keeps students engaged and helps them stay in school.

Based on the success of the pilot program, the school administration asked us to continue instruction in the form of a Woodturning Club on Friday afternoons. The Board of Education purchased two mini lathes, and Nor-Cal lent the school four club lathes at the start. Nor-Cal members then donated three used lathes to the school, so club lathes can be returned. A former welding shop at the school was converted to a workshop, where each Friday, Nor-Cal volunteers coach/mentor the students. The Woodturning Club is currently limited to six students and there is a long waiting list. We hope to raise funds for more equipment so that every interested student can participate.

The summer pilot program followed the AAW curriculum guide, selecting projects that would appeal to high school seniors. Before starting the program, the coaches received training on how to work with the students. As compared to the summer pilot program, the Woodturning Club is less structured. We downloaded and put into folders project plans that would be appropriate for high school students. Sessions start with a safety lesson, and then the students decide on a project. The coaches work one-on-one with the students, selecting wood and guiding them through the project. Projects include: candlesticks, dibbles (garden tool), honey dippers, pens, vases, magic wands, eggs, tops, mallets, tea lights, doorstops, and bowls. The students appreciate the attention and in return show respect for the coaches.

Coach and student work together at Leo A. Palmiter Jr./Sr. High School Woodworking Club.

Pens are among the many projects available for the students to make.

They take the machines and tools seriously.

At the September SCOE Board of Education meeting, Nor-Cal Woodturners received a Community Service Award of Appreciation: "For your generous commitment of time, support and inspiration to our LINKS students. Thank you for the difference you have made." Per the SCOE website, "The LINKS model establishes a culture of continuous improvement for each student. The goal is to normalize the education delivery model for youth aged 14–18 and to make it look and feel more like a 'comprehensive' high school program."

Principal Lauren Roth spoke of the student enthusiasm and accomplishments, such as teamwork, following directions, and maintaining good behavior. She quoted a faculty member saying this was the best volunteer program ever conducted at the school. The woodturning club is being used as a reward to help teachers affect student behavior and performance. Several students, who previously had not responded to other motivation, have demonstrated significant improvement and earned their reward: attendance at Woodturning Club on Friday.

Teaching guidelines and projects can be downloaded from the AAW website at woodturner.org/Member/TeachingGuide_a.pdf. Some projects are available from WoodturningOnline at woodturningonline.com/Turning/Turning_projects.php. ■

—Ted Young, Community Outreach Chairman

Mastering Woodturning
Bowl Turning Techniques by Glenn Lucas

Glenn Lucas's first video of this series covers basic woodturning tools and techniques and is directed primarily at the beginning woodturner. In the second of the series, Glenn raises the bar and focuses on the more sophisticated equipment, processes, and techniques associated with production bowl turning. While much of this presentation will be directly useful to beginners, other parts will be of value primarily to production turners. Almost everyone, however, will find it interesting. The video is a storybook (set to music) showing the entire process of bowl production starting with a log and ending with bowls ready for market. Like its predecessor, *Bowl Turning Techniques* is a polished presentation with clear photography throughout.

The bowl production process begins with the conversion of either green wood slabs or green logs into round bowl blanks. Glenn first uses a chainsaw to cut the timber into rectangular pieces and then uses a bandsaw to trim the results into round bowl blanks. As part of this, he shows how to make the most efficient use of timber while allowing for shrinkage of the green wood. Following his custom in the first video, he describes how to use and maintain each new tool, in this case the chainsaw and bandsaw, before demonstrating its use.

At this point, the rough turning of the bowls begins. Glenn shows a novel time-efficient method for initial mounting of a bowl blank between centers and then demonstrates how to cut a chucking tenon and how to shape the outside of the bowl rapidly. He then reverses the bowl into a chuck and shows how to core two smaller bowls from the parent bowl using some innovative techniques he devised.

The green bowls need to dry before the final turning operation. To speed up this process, Glenn paints his rough-turned bowls with an endgrain sealer and kiln dries them. He describes this process in detail, including his method of stacking the bowls in the kiln and his use of stickering to maintain air circulation around the individual bowls. He also describes the program of airflow and temperature control that he uses to minimize cracking.

After about eight weeks of drying, the bowls are ready for finish turning. Glenn employs a novel method for remounting dried bowls that accommodates any slight warping of the bowls. Using this mounting, he shapes, sands, and oil finishes the outside of the bowl and recuts a proper chuck tenon for addressing the inside. After turning, sanding, and finishing the inside, he uses a vacuum chuck to reverse the bowl for the last step of turning off the tenon and finishing the base. All of these operations are explained in full detail.

The Glenn Lucas videos are available from Woodworker's Emporium (woodworkersemporium.com), Craft Supplies USA (woodturnerscatalog.com) or directly from glennlucas.com. ■

—Dennis J. Gooding

Versatile Tool Holder

If you have rasps or files in your shop, for safety as well as for comfort and control, it is best that they be used with handles on them. Turning just two handles, one large and one small, will suffice for all your rasps and files.

This versatile handle (or tool holder) uses a 1/4-20 threaded insert and a knurled screw *(Photos 1a, 1b)* that will secure the tang of a file or rasp into the handle. For the small handle, I sized down an insert and screw by using a rotary tool and a hacksaw to make it smaller, but you may be able to find thumbscrews in the exact sizes you need.

Select a length of wood in a size that will fit your hands and have sufficient diameter for holding the tang of files and rasps. Drill two holes. On the face of the wood the hole is ⅜" (10 mm) diameter for the 1/4-20 threaded insert. Drill the other hole into the endgrain. That hole is ⅛" (3 mm) diameter for a small tang or ⅜" (10 mm) diameter for a large one *(Photo 2)*. Mount the stock onto the lathe between centers and turn the wood to the desired shape. Apply whatever finish you prefer.

Install the threaded insert into the predrilled hole *(Photo 3)* using a slot screwdriver or an insert nut driver (available from Lee Valley Tools at leevalley.com). Your one-of-a-kind file handle is ready to use!

—Charles Mak lives in Canada. He can be contacted at spindleturning@gmail.com.

Threaded inserts and thumbscrews come in different styles and sizes.

Drill two holes, one for the tang of a rasp or file, the other to fit the insert into.

After waxing the threads, drive the inserts into the holes.

Warning On: "Add Reverse to a Mini Lathe"

Several concerns have been expressed about possible hazards associated with the modification described in the article, "Add Reverse to a Mini Lathe" by Don Doyle in the December 2011 issue of *AW*. These concerns can be divided into two categories: electrical and mechanical. Note that the mini lathes in question use DC motors. Even though the power coming out of the wall and going into the controller is AC, the power applied to the motor is DC.


This photo shows a Vicmarc VL300 lathe with a Vicmarc faceplate mounted on it. Notice the matching grooves on the faceplate and the spindle. One half of the collar/retaining ring is removed to show how the faceplate is retained. When the complete retaining ring is mounted, it prevents the faceplate from unscrewing when the lathe is in reverse.

Electrical concerns

If the reversing switch is moved from forward to reverse, or vice versa, while the lathe is running, the energy surge may cause significant (expensive) damage to the controller and/or the motor. Always use the main Off/On switch to turn the lathe off before changing the reversing switch.

It has been observed that with some controllers, under some circumstances, there may be residual energy stored in internal capacitors. With these controllers, if the reversing switch is moved to the Off position while the lathe is running, a residual charge may remain in the internal capacitors. With the main switch off, if the reversing switch is then moved into the forward or the reverse position, the stored energy may be enough to cause unexpected rotation of the spindle. This unexpected movement could cause injury to the operator. *Do not change the reversing switch while the lathe is running.* Use the main switch to turn off the lathe before changing the reversing switch.

Mechanical concerns

In the article, Don Doyle states, "If you are using a chuck or faceplate, reversing the rotation of the lathe may cause the chuck or faceplate to be unscrewed from the spindle. Take the necessary precautions to secure these holding devices

to the spindle." The "necessary precautions" will vary depending upon the equipment being used. Some turners have been successful by applying extra torque to the chuck or faceplate to get it set tight before using it in reverse. But some manufacturers do not consider this adequate for general usage and have provided more reliable methods. Nova, for instance, uses a grub screw to retain the adapter bushing into the chuck housing and then the adapter bushing is drilled and tapped for another grub screw to hold the adapter onto the spindle. (A *grub screw* is a regular setscrew with a fiber plug below it to protect the threads from damage when the setscrew is tightened.) Vicmarc uses a groove cut into the spindle with a matching groove on their faceplate (see photo). A collar is then applied, capturing the two grooves and preventing the faceplate from unscrewing. You should familiarize yourself with the provisions your equipment uses to prevent unscrewing from the spindle while operating in reverse and be sure to use those provisions.

Some mini lathes use the outboard handwheel to help hold the spindle bearings in place. If the grub screw securing the handwheel is loose, then running the lathe in reverse may allow the handwheel to loosen, resulting in a lack of support to hold the spindle bearings properly. *To avoid this potential problem, check your mini lathe to ensure that the handwheel is secure.* ■

—John Giem

In Memory of Jan Peters Co-Owner of del Mano Gallery

Jan Peters, co-owner of del Mano Gallery, passed away December 5 in Los Angeles after a twelve-year battle with cancer. Jan was 64.

For the past three decades, Jan and business partner Ray Leier played pivotal roles in the expansion of woodturning. Through their vision and dedication, they helped elevate the quality of work and professionalism within the field. Jan and Ray opened del Mano Gallery in 1973 and it soon became a venue that specialized in wood art.

In a conversation I had with Jan in 2010, I recall her saying, "Helping individuals to become world-class artists and being part of the movement of getting wood accepted as a legitimate art form are two of the things I hope I'm remembered for. I know I'm one of the luckiest women in the world to have met some amazing, talented people over the years. I'll treasure their friendships forever."

Jan was the business manager at del Mano. She took a proactive approach, making the gallery synonymous with carrying the best wood art. She took joy in producing striking print ads for national magazines, which contributed greatly to raising awareness of the medium within the art and craft worlds.

Jan, Ray, and Kevin Wallace (gallery creative director from 1991–2001) authored three high-quality coffee-table books on woodturning in the 1990s, which became essential reading for a growing legion of turners, collectors, museum curators, and other gallery owners. Each year, they published and distributed full-color catalogs of the six in-house exhibitions they staged each year.

With the coming of the Internet in the 1990s, professional images on the gallery's website replaced most of the catalogs, many taken by Jan's professional photographer husband, David. "Del Mano's website was like opening a window into all the eye candy in woodturning," said Stephen Gleasner, a wood artist from Maine. "You could just click and see the amazing things people from all over the country were doing."

For many woodturning artists, listing del Mano representation on their resume provided worldwide credibility. It was a statement that they were among the elite in the field.

"Jan is really going to be missed by a lot of people," said AAW president Tom Wirsing. "She and Ray were highly involved in every phase of the field for many years. They were always there. I didn't know Jan as well as I do Ray, but I know if I needed something done, she would get people organized and get it done ASAP."

Jan was a founding member of the Bead Society of Los Angeles and served on the Board of Directors of the Collectors of Wood Art (CWA), the LA Glass Alliance, and the National Basketry Organization. She was a member of the Design Review Board of the San Vicente Scenic Corridor, Los Angeles; served on the Board of The Boys and Girls Club of Venice, CA; and annually helped raise money for the Craft Emergency Relief Fund (CERF+). She and Ray received the Lifetime Achievement Award from the CWA and she was the recipient of the Medallion Award from the Boys Clubs of America. ■

—Dave Long

Calendar of Events

April issue deadline: February 15

Send information to editorscarpino@gmail.com

Mark your calendars now!
AAW International Symposium
June 8-12, 2012
San José, California

Australia
March 22–25, TurnFest! For information about this tenth-year anniversary event, featuring demonstrators from around the world, visit TurnFest.com.au.

Canada
March 24, 25, The Matisho Memorial Woodturning Cancer Benefit, Waldheim, Saskatchewan. Woodturners will gather to share skills and raise money to support the Canadian Cancer Society. For more information, visit turnersforcancerresearch.org or contact Glen Friesen at glenfriesen@sasktel.net.

July 27–29, Saskatoon Twenty-Twelve Woodturning Symposium, SIAST Kelsey Campus, Saskatoon, Saskatchewan. Featured demonstrators include Clay Foster, Mark Sfirri, Jimmy Clewes, Beth Ireland, Andrew Glazebrook, Lyonel Grant, Michael Hosaluk, along with local demonstrators. For more information, visit hubcityturners.ca or call Saskatchewan Craft Council at 306-653-3616.

Colorado
September 8, 9, Rocky Mountain Woodturning Symposium, held at The Ranch/Larimer County Fairgrounds, Loveland. Feature demonstrators include John Jordan, JoHannes Michelsen, Trent Bosch, and Allen Jensen. For more information, visit rmwt.org.

Florida
February 3–5, Florida Woodturning Symposium, Lake Yale Convention Center. Featured demonstrators include Tim Yoder, Dick Sing, Mark St. Leger, and Don Derry. Local demonstrators are Lee Sky, Nick Di Mona, Norm Rose, and Tim Rowe. Workshop leaders are Don Geiger, Ted Smith, Charlie Schrum, Kurt Hertzog, and Rudy Lopez. Check out our website at floridawoodturningsymposium.com.

Georgia
April 27–29, Southern States XII Woodturning Symposium, Georgia MountainsCenter, Gainesville. Featured demonstrators include Kimberly Winkle, Jimmy Clewes, Bill Grumbine, and Mark St. Leger. Guest demonstrators will be announced in January. Forty rotations, Instant Gallery, gift certificates, door prizes, large vendor area, and banquet and auction Saturday evening. Information is available at southernstatessymposium.org or contact Marsha Barnes at 828-837-6532 or ml.barnes@brmemc.net

Hawaii
March 2–30, The Big Island Woodturners 14th Annual Exhibit at the Wailoa Center Gallery in Hilo. Opening artist reception, March 2. Turning demonstrations every Saturday. For more information, email hawaiiwoodturner@yahoo.com.

Idaho
February 25 and 26, The 2012 Idaho Artistry in Wood Show, Boise Hotel and Conference Center. Competitions are for all skill levels, with cash prizes for top entries. Onsite registration of entries is February 24. Open to everyone. The show will feature demonstrations, vendors, and an auction and banquet. Prospectus and registration forms are available on the IAW website, idahoartistryinwood.org. For specific questions, email Doug Rose at roseboise@yahoo.com.

Illinois
August 3–5, Turn-On! Chicago, Mundelein, IL. Three full days with 60 demonstrations, hands-on events, tradeshow, onsite meals and housing, banquet, and auction. Demonstrators include Eli Avisera, Stuart Batty, Dixie Biggs, Bonnie Klein, John Jordan, and Kurt Hertzog. For event information, including a complete list of demonstrators, visit turnonchicago.com.

Minnesota
January 2–February 29, "Art from the Lathe: Selections from the AAW Permanent Collection," Gallery of Wood Art, Landmark Center, Saint Paul. For more information visit, galleryofwoodart.org

March 4–May 24, "Beyond Containment," 5th Annual POP International Invitational exhibit, Gallery of Wood Art, Landmark Center, Saint Paul. Visit galleryofwoodart.org for more information.

Missouri
February 10–April 8, "Studio Design: Contemporary Furniture," Kranzberg Arts Center, St. Louis, features the work of Kimberly Winkle, Brian Ferrell, and Matt Keim. On February 11, Kimberly Winkle will lead a workshop on turning duplicate candlesticks and painting with milk paint. For more information, visit craftalliance.org or call 314-725-1177.

New Hampshire
May 4–5, seventh New England Woodturning Symposium, Pinkerton Academy, Derry, hosted by the Guild of NH Woodworkers and Granite State Woodturners. The event features more than 25 presenters, an Instant Gallery, and tradeshow. Friday is Youth Day, which allows students to attend free. For more information visit GNHW.org.

New York
March 31–April 1, Totally Turning Symposium, held in conjunction with the 21st Annual Woodworkers' Showcase. Featured presenters include Trent Bosch, Giles Gilson, Kurt Hertzog, Joe Herrmann, Peter Lovalo, Glenn Lucas, David Nittmann, Chris Pytlik, and others. More details available at totallyturning.com.

Pennsylvania
March 2-4, 11th Annual Woodturning and Carving Fair, Tylersport Fire Company, Tylersport. The event features demonstrations each day and live auctions on Saturday and Sunday. Check the AAW Forum at woodturner.org for more details.

Utah
May 16, Super Wednesday at Craft Supplies USA. Kick off the Utah Woodturning Symposium with us! More than 20 free demonstrations, clearance sale, door prizes, and much more! Barbeque luncheon offered. For more information, visit woodturnerscatalog.com.

May 17–19, 33rd Annual Utah Woodturning Symposium, UCCU Events Center, Utah Valley University, Orem, a reunion of family and friends, woodturners of all skill levels. Sponsored by Craft Supplies USA, three full days include demonstrators from around the world, hands-on events, live auction, pen-turners rendezvous, vendor showcase, banquet, silent auction, swap meet, and Instant Gallery. Online registration at utahwoodturning.com. For specific questions, email Susan Hendrix at shendrix@byu.net or call 801-471-0758.

Virginia
September 15–16, Virginia Woodturners' Symposium, Expoland in Fishersville. Featured demonstrator, Jimmy Clewes, will demonstrate both days. Hands-on sessions set this symposium apart from others with 4 rotations of 12 workstations each. Attendees will receive in-depth, up-close, hands-on woodturning instruction from individual mentors. New turners welcome. Visit virginiawoodturners.com for developing information.

Washington
March 10, A Day with Alan Stirt, at the Anacortes First Baptist Church, Anacortes. This all-day demonstration will feature open-bowl turning, fluted and carved bowls, sgraffito platters, square and textured platters, plus an image show/discussion of Al's work. Registration is $40 and includes lunch. Sponsored by Northwest Washington Woodturners. For more information visit nwwwt.org/AlStirtDemoPoster-1.pdf or email Rick Anderson at president@nwwwt.org.

July 28, fifth annual Creativity in Woodturning symposium, Komachin Middle School, Lacey, sponsored by Woodturners of Olympia. Featured presenter is David Ellsworth. James Leary starts the day with a session on basic cuts for spindle turning. Registration includes lunch and is $90 until May 31, $100 afterward. Youth under 18 is $10 if registering with an adult.

Four days of hands-on workshops are scheduled for July 29 through August 1. Workshops are $150 and are limited to eight participants. For more information on the symposium and workshops and to register, visit woodturnersofolympia.org or email Al Price at aprice44@aol.com.

ShrinkBoxes

Scandinavian Heritage in Minnesota

This painted and chipcarved shrinkbox, 1855, has a floral motif top and was used for tobacco.

Vesterheim Norwegian American Museum collection in Decorah, Iowa.

Jim Sannerud

Minnesota has strong ties to Scandinavian immigrant history and traditions. Many immigrants settled along the St. Croix River Valley because the landscape reminded them of their homeland. The town of Lindström celebrates Karl Oskar days annually, based on the novels of Wilhelm Moberg that chronicle Swedish immigration to the area. The Minnesota Vikings are named after the conquering Norsemen (even if they can't live up to the image).

The Vikings of Scandinavia, however, weren't just conquerors and warriors who traveled in their unique, signature-style boats, ransacking villages all over Europe. They were skilled craftspeople who gave us first glimpses into metalsmithing, as well as experienced hands at woodworking of all kinds, including the lathe. They celebrated with ale bowls and stored their goods in krympburk. It is from this tradition that the *shrink box* has been formed.

The shrink box is a vessel made from a hollowed tree, essentially a short section of wooden pipe made from a green tree branch, with a small kerf in the bottom to fit a dry piece of wood. If all the steps are done correctly, the green branch will shrink around the dry base and create a watertight vessel. The Vikings used these open vessels for drinking or would make tight-fitting lids creating containers for storing salt and spices. I have also seen one so large that a man could stand inside the shrink box. This large box was used for brewing beer.

Traditionally, the hollowing was done by hand with an auger and knife, while the outside was shaped with an ax. These first steps may take a full day when done by hand. An extensive knowledge of turning and slöjd traditions combined with my studies of different hollowed forms in Scandinavian museums in Sweden and the U.S. have brought the tradition of the knife together with the use of the modern lathe to save time hollowing and forming the vessel.

One reason I enjoy this style of woodturning is the traditional technique involved. The use of the shavehorse, ax, slöjd knife, and assorted carving tools combine with the way I like to work with wood. There's a difference between working "with" wood and working "on" wood. Handwork and today's lathes provide a level of give and take with the wood, a reciprocity where both the wood and I have a say in how the piece is going to evolve and eventually turn out, which is what I love. Outside of my lathe, I have found that ▸

1 Mount a length of green wood between centers and turn to a cylinder.

2 Turn a tenon for a 4-jaw chuck.

3 Hollow out the inside of the box. A hook tool works well, or use any other safe method. You are turning endgrain.

4 Create a kerf on the inside of the box.

Part off the box.

Use the knife to remove excess and/or clean the bottom of the box.

Gently clamp the box, making it slightly more oval. Place it onto the dry wood and mark the outline of a form for bottom.

Define the inside diameter on the dry wood that will be used for bottom.

Saw out the dry form for bottom. I start with a handsaw, but a bandsaw can be used.

Follow outside the marking to cut the wood to the size marked with a pencil.

Further shape the wood to an exact fit. I generally leave a "tail" on one end to aid in holding for the next steps.

Mark the thickness for the kerf.

Mark a line to where the chamfer will be cut.

Use a drawknife to create the chamfer. Be sure to cut with the grain of the wood. Here is where the extra wood comes in handy for helping hold the wood in place.

To further refine the chamfer, I use a knife to cut the bottom away from the tail.

Gently squeeze the green form to fit into the dry bottom inside the kerf.

the use of power-carving tools, CA glue, and sandpaper creates a feeling of working "on" the wood, which lessens that reciprocal relationship, creating a detached feeling from the wood. Tools powered by my hands alone, along with the shaping on the lathe, create a fluid, connected process in the work that gives back to my creativity.

Wood selection

Birch is a traditional choice of wood for shrink boxes. I love the grain of the wood as well as the fragrance. I look for straight, clear trunks varying in diameter from 3" up to 8" (8 cm to 20 cm). If I have to cut a fresh tree down, I use as much of the tree as possible and keep the wood in the freezer until it's turned. The portion of the tree that has branches I use to make coat hooks, carve spoons, and make butter spreaders. I give the bark to a friend to make birchbark boxes, using every last bit of the tree.

Prepare the wood

The first step is to cut the blank to length, adding 2" (5 cm) for the tenon and for parting off. Mount the green timber between centers and turn a cylinder *(Photo 1)*. Turn a tenon on the bottom *(Photo 2)*. When the cylinder is round, remove it from between centers and mount it by the tenon into a 4-jaw chuck.

Begin hollowing the cylinder, establishing the wall thickness *(Photo 3)*. The thickness will depend on the size of the piece you are working on and its intended use. I have some boxes as thin as ⅛" (3 mm) and others as thick as ⅓" (7 or 8 mm).

Turn a kerf

Work into the cylinder about 1" (25 mm) and then add the kerf to eventually receive the dry bottom *(Photo 4)*. Keep in mind that you are beginning the box from the bottom and hollowing toward

Slöjd and slöjd knives

Slöjd is not just a type of craft or an easily defined translation about craft. Some people simply equate it to handwork or craftsmanship in a Scandinavian tradition. *Slöjd* in the broadest sense of the word is a philosophy about the entire process of creating works by hand, educating others to be crafted and self-sufficient while integrating a beauty and appreciation for the folk art and tradition of the culture. The knife is considered to be the first and most basic tool of the craft, the use of which should be mastered by a slöjder. Most "slöjd" knives are made of laminated steel, a blade length usually around 3" (75 mm) and a width of ¾" (20 mm), mounted in an oval handle easily fit to the hand.

the top of the piece, and that you are turning endgrain.

I've taken a flat piece of steel and formed it to create the profile for the kerf, which needs to be flat on the top and angled at the bottom. This tool allows me to adjust the depth and thickness of the kerf using only one tool. The depth of the kerf will depend on the size of your shrink box. The distance between the kerf and the bottom wall of the box should be enough to clear the thickness of the dry piece of wood. I usually work between ⅜" (10 mm) and ¼" (6 mm).

Be sure to create the kerf *before* the rest of the box is hollowed out or the box may not be strong enough to support the cut. If you forget and hollow the box before you make the kerf, use your hand on the outside of the box to offer support while creating the kerf.

Part off the box

Continue hollowing the box out to the desired depth, working incrementally down the wall thickness. Using a thin-kerf parting tool, part the box off *(Photo 5)*. If the box is too thick at the top you can use your slöjd knife (or other sharp carving knife) at this time to thin the wall thickness at the top of the box *(Photo 6)*. Place the box perpendicular on your right thigh, the kerf to your left. Hold the slöjd knife underhand, thumb on the end of the handle and blade away from you. Roll the box away from you, allowing the knife to cut as it rolls. Be careful if you are making a short box so that the knife blade doesn't stick out the other end into your thigh.

Form the base

To form the base of the shrink box, plane down or use a drawknife to make a board about ¼" (6 mm) thick. Increase the thickness of the base as the diameter of the box increases. Place the box, kerf side down, on the board and squeeze a little with a clamp *(Photo 7)*. Do not tighten the clamp too much. I usually can

squeeze adequately with my hand, but prefer to use the clamp so I have even pressure and free up both hands to work.

Trace a line on the inside of the box on the bottom of the board *(Photo 8)*. A note on grain orientation: I have found that aesthetically, I like the grain of the base to run parallel to the oval shape of the box. The base is fairly static; it's the green form that is changing. Cut out the base with either the bandsaw or with a handsaw using your shave horse to hold while you cut *(Photos 9, 10, 11)*.

Next, you'll need to chamfer the outside perimeter of the base piece by marking a line around the side of ▸

17 Gently push the bottom—if everything goes well, it should pop into place.

18 The dry base placed in the green form should have a gap on each side. After the box dries, those gaps will close up.

19 The completed box is sealed, after a week of drying, bottom view.

20 Inside view of the completed box shows no gaps.

the bottom about 1/16" (2 mm) down from the top of the edge *(Photo 12)*. On the underside of the base, mark a line about a ½" (5 mm) in *(Photo 13)*. Using your slöjd knife, connect the two lines creating a chamfer cut, always working with the grain of the wood and not cutting your fingers *(Photos 14, 15)*. Finish cutting and chamfering the entire base.

Insert the base into the kerf created at the bottom of the box *(Photos 16, 17)*. If your box is round, the base should be loose with a little daylight showing. If your box is oval or ovoid there should be about 1/16" to ⅛" (2 to 3 mm) of clear space at the long sides of the base *(Photo 18)*.

Allow your box to sit for a week to ensure the box has thoroughly dried, especially if you are going to make a lid *(Photos 19, 20)*. You can tell if it is dry by touching the side of the box with your fingers or better yet your lips—the box is dried completely if it does not feel cool to the touch.

Lid

To make a lid, I use a board of ⅜" thickness (10 mm). I trace the dried box top along the outside and hand-draw a line on the inside of the traced line that corresponds with the wall thickness of the box. The sides of the lid need to be chamfered to allow for seasonal movement of the box. You can saw or carve the lid; I prefer hand carving. I drill a small hole for a turned knob on the top, offset to one side for leverage to open the box lid. If made correctly, the lid should "pop" when opened.

Modifications

An advanced version is to include a ring when shaping the outside of the shrink box for handles. If you have made a ring to form handles you will need to carve the majority of the wood away so that the box will bend. You can finish carving the handles when the wood dries. I also carve and paint the outside of my boxes, using egg tempera and other pigment mixes, in keeping with traditional techniques. ■

Jim Sannerud is a professional woodturner with his studio in Saint Paul, MN. He has shown and sold his turnings nationally and shares his infectious enthusiasm for woodturning and carving with a wide variety of students. He teaches regularly for regional college and university art programs, folk schools, museums, community education programs, and AAW local chapters. More of Jim's work can be seen on his website, jsannerud.com.

All photos by Tib Shaw.

Lidded Box

Inspired by a Foxtail Palm Seedpod

Neil Scobie

When running a workshop in North Queensland (Australia), I stayed with good friends, and in their garden I found an interesting seedpod. With further investigation, we concluded that it was from a foxtail palm tree. I was inspired by the natural beauty of the intertwined markings and started to think how I could use these markings in a turned and carved piece. I did not need to make a direct copy of the seedpod; instead I would use it for inspiration, taking artistic license to create my own version. After making some sketches, I came up with the idea of making a lidded box with shaped ends. It is a simple project that is achievable by those with a little turning and carving experience.

My first plan of action was to make a prototype to practice the carving technique required to make similar markings on the pod. Being an optimist, I thought I could replicate the markings with a little carving and burning. I turned a lemon-shaped pod and started carving with a small gouge and number-one carving knife, followed by a pyrography burner. I soon realized that this was going to be much harder than I first thought and surmised that without the skills and patience of someone like Jacques Vesery, I should change my carving plan. Sometimes a simple form has more grace.

You will need a rotary tool or small carving gouges—even a carving knife will do the job. For the markings, a burning tool with a knife-shaped wire works well.

Turn the pod

Cut the blank to size and place it between centers. Turn a cylinder. Turn a spigot on each end of the cylinder to fit the chuck you are going to use. Shape the outside of the pod, leaving the part next to the spigot about 1" (25 mm) in diameter until the hollowing process is finished. Next, mark the place where you are going to separate the two pieces, and using a parting tool, turn a shallow recess for the spigot to fit the lid on the bottom half of the pod *(Photo 1)*. Part off the lid section, leaving about ⅜" (10 mm) to saw off.

Turn the lid

Place the lid in the chuck and hollow out the inside *(Photo 2)*. The grain is running parallel to the lathe, so cut from the inside toward the outside rim to cut with the grain (endgrain). There are many hollowing tools that can be used for this process, but a spindle gouge will do the job quickly and efficiently—it is a shallow hollowing process.

The important part of hollowing the lid is to make sure that the first ¼" (6 mm) of the inside is parallel so the lid will fit the base section securely *(Photo 3)*. Fully sand the inside being careful not to round over the parallel section. Next, turn as much of the top part of the outside of the lid as possible, checking the wall thickness so that you do not go too thin *(Photo 4)*.

Seeds of the foxtail palm.

Turn the bottom

Place the bottom section into the chuck and turn the spigot to match with the lid *(Photo 5)*. At this stage, the fit should be reasonably tight, but not too tight, otherwise the lid might split or remain stuck.

Place the lid on the bottom and advance the tailstock for support *(Photo 6)*. Turn the outside of the bottom section of the pod so that you have a smooth transition from lid to bottom. Turn away most of the chuck spigot from the top of the lid to a diameter of about ½" (13 mm) . Sand the outside of the lid (to about 180 grit if you will be burning a design). Remove the lid and set it aside.

You are now ready to turn the inside of the bottom section. Hollow the ▸

The fruit of the foxtail palm tree is red. When the fruit matures, the red falls off and the black markings are left.

Turn the profile of the box with spigots on each end to fit a scroll chuck.

Hollow the inside of the lid. You are turning endgrain, so the direction of the cut is from the center to the rim.

Check that the opening has parallel sides so that the lid will fit properly.

Most of the lid is shaped and sanded.

Turn the spigot on the bottom to fit the lid.

Place the lid onto the bottom and bring up the tailstock. Finish turning the outside of the lid.

The inside of the bottom is hollowed and sanded.

The profile of the box is shaped and ready for carving the ends.

inside the same way you did the interior of the lid. Make the wall thickness parallel and about ⅛" (3 mm) thick *(Photo 7)*. Make the lid fit properly—tight, but not too tight. Sand the bottom tenon, but remember that the difference between too tight and too loose is not much. Turn the tail section of the bottom half so that it's almost ready for carving *(Photo 8)*. Sand to 180 grit the outside of the pod, except for the tail.

Carve the curl on the lid

To be able to carve the top of the lid and turn the remainder of the tail on the bottom section, I found it best to make a jam-fit chuck. Turn a spigot on one end to fit into a scroll chuck and a spigot on the other end to fit inside the lid, making sure you have a step on the outside for the lip to press up against *(Photo 9)*. Press the top section of the pod onto the jam-fit spigot and carve the curl on the top of the lid *(Photos 10, 11, 12)*. Resize the jam-fit spigot to suit the bottom section. Place the bottom onto the spigot and use the tailstock to support the outer end.

A pod made from boxwood.

Carve the tail

A small carving disc powered by a rotary tool works well to carve the tail. With the tail supported by the tailstock, you will have good control the rotary tool *(Photo 13)*. I thought that the tail looked better if it had a slight spiral twist, so draw the twist onto the spiral and carve following the lines. A carving knife works well to refine the shape *(Photo 14)*.

After the tail is roughly shaped, it can be sanded with a small-diameter sanding pad in an electric drill (or small sander or drum sander), working through the grits *(Photo 15)*. Or, sand by hand. The piece is small and sanding should go quickly.

When most of the tail is sanded, remove the jam-fit chuck from the scroll chuck, leaving the pod still on it. This will give you something to hold onto to carve away the part that was held with the tailstock center. After carving away the excess wood, sand the tail. Hand-sand any areas that have hills or hollows *(Photo 16)*.

Burn the pattern

You may prefer to leave your pod with no decoration, but if you like the idea of burning a design, it is not very difficult—you can use a commercial burning tip. Not having the tip I needed, I shaped a piece of 16-gauge Ni Cad wire to a knife shape by heating it to red hot and forging it with a hammer on a metal block, followed by final shaping with a small file. If the wire has a fine knife-edge it will easily run along the surface and form a deep cut. After I shaped the wire, I heated it to red-hot then let it cool. This annealed the wire making it less brittle.

To create the pattern shown, make a series of long, open S-shaped burns that cross over each other *(Photo 17)*. It may take a little practice to get a design you are satisfied with, but if you practice first on waste timber then you can figure out what


Use a waste block as a jam-fit chuck to hold the lid for carving.


Shape the top of the lid. I am using a rotary carver. To ensure that the lid stays onto the jam-fit chuck, you might want to wrap the joint with tape.


Refine the shape of the lid with a rotary burr.


Either sand by hand or use a small sanding disc to smooth the shaped lid.


With the bottom placed onto the jam-fit chuck, shape the tail.


A carving knife can be used to further refine the shape of the tail.


Either sand hand or use a small disc sander to smooth the tail.


The pod is ready for burning. Or, you can leave it unadorned.

works. When you are ready burn the design onto the pod, start at the tip of the top and work down to the end of the tail. The burn lines are close enough together, so it is not essential that you keep the lid in the same position to the bottom section for the whole burning process *(Photo 18)*.

Ebonize the pod

If you want a black pod, then you will need to dye it. To make ebonizing solution, pour brown vinegar into a jar and throw in some steel wool or a few uncoated steel nails. After three or four days, remove the steel wool or nails (otherwise, the solution will eventually turn a rusty color).

The more tannin in the wood, the darker the result will be. Timber such as pine will only turn gray; it does not contain much tannin. Wear a pair of rubber or nitrile gloves. Using a fine scouring pad, rub the solution into the pod inside and out. The scouring pad will sand off any scale left by the burning. Let the wood dry fully, and if the color is not as dark as you like, repeat the process. You could also use a commercial dye or stain.

You can further refine the ebonized surface by using a fine abrasive to lightly sand off the tops of the burnt pattern to expose some of the parent wood. For example, if you used a reddish-colored wood, red highlights will appear. Practice on your waste wood to see which option you like best.

Apply finish

Apply some of your favorite finish to seal in the surface decoration. My choice was four coats of a nontoxic, hand-rubbed oil finish. Rub back with fine steel wool between coats.

This is a fun little project with lots of choices for you to add your own design options. Perhaps there is a seedpod in your garden or forest that will inspire you to re-create a pleasing pattern. A small project such as this does not use much wood or require expensive tools. A bit of imagination, and you're on your way! ■

Neil Scobie contributes regularly to American Woodturner. *He lives in Lower Bucca, New South Wales, Australia.*


I have used a shopmade tip on my pyrographer to burn this design.


The pod will look like this after burning. Dyeing is the next step.


Finished palm seedpod.

View *of a* Regional Symposium

Jake Debski

(Above) Giles Gilson sets up his Instant Gallery display as Richard Raffan looks on.

Beginning in January in Tennessee, and continuing through November in North Carolina, there is a symposium within a day's drive of vast numbers of woodturners. Regional symposiums located in warm-weather states like Florida and Arizona attract turners during winter months, not only for their excellent lineup of demonstrators but also for the warmer weather they offer. The Utah symposium has a devout national, international, and local following. These symposiums, along with *American Woodturner* and AAW's local chapters, are the fodder that feeds us woodturners, hungry for information, ideas, and the camaraderie of the like-minded.

Totally Turning (TT) is a regional symposium I regularly attend. Located in upstate New York at Saratoga Springs, it draws attendees from east coast states, as well as from Canada. The event is hosted by the Adirondack Woodturners Association (AWA), one of several special-interest groups that make up the 850-plus members of the Northeastern Woodworkers Association (NWA).

Three years ago at the urging of Ken Evans and Peter Case (chairmen of their respective events, Showcase and TT), TT moved their symposium from Albany to Saratoga Springs. It was a quantum leap forward. The event gained a venue with a hometown atmosphere, excellent hotels, and easy walking distance to restaurants. The crown jewel in the move, though, was the decision to hold TT concurrently with the NWA's long-running and highly regarded Showcase event. Showcase is a wood lover's paradise of finely crafted, beautiful, one-off items ranging from functional and traditional to sculptural and futuristic. It's all on display.

The 2011 Totally Turning and Showcase gathering was the best ever. Totally Turning drew 350 attendees, and Showcase boasted a whooping 3,700! Totally Turning's lineup of internationally and nationally recognized demonstrators included Dale Nish, Richard Raffan, Giles Gilson, Curt Theobald, Jennifer Shirley, Kurt Hertzog, Paul Petrie, John Franklin, Andy DiPietro, Rick Angus, and George Guadiane, a group representative of the ever-expanding interests of today's woodturners. With twenty rotations on each day of the two-day run, plus the vendor area and the Instant Gallery, attendees had plenty to see and do.

From my point of view, the fun started the day prior to the event's opening. While standing well out of the way, I watched the organized chaos of 400-plus volunteers, vendors, and all manner of craftsmen bringing pieces to the Instant Gallery and demonstrators checking equipment and setting up demonstration rooms. The transformation of chaos into show-time readiness was a sidewalk superintendent's fantasy.

I greeted other early arrivals. Some are friends; others more recently met at TT. The afternoon went quickly and a small group gathered, so we headed to one of the eateries.

I picked up my registration packet later that evening from one of the many AWA volunteers staffing the tables. It was time to find a quiet corner or retreat to my room to prioritize the rotations that were a must-see and pencil in second choices if a first-choice room was filled. There was so much to choose from, but so little time.

As with every other symposium I've attended, the next couple of days were

a blur of rotations, visits to the Instant Gallery, and trying not to over-tax my credit card. This year I attended four rotations by local AWA members and was wowed by them all, especially the technical information presented by a first-time demonstrator. I'm still experimenting using the detailed handout he provided.

I generally skip one rotation each day to allow time for seeing other events. Day one was for an extended visit to the Instant Gallery (I took shorter visits during lunch breaks). The vendor area was day two, which allowed me to take my time watching the vendor demonstrations, asking questions, and listening to talented and knowledgeable artists discuss their techniques. The eighty or so vendors, many of whom are longtime woodworkers and turners, are a wealth of knowledge and not just about what they sell.

I took some time to watch a few hands-on demonstrations given by the NWA's special-interest groups: Kids, ably guided by NWA member volunteers, worked on various projects, this year, a basic toolbox. A bit farther on, preteens through adults turned pens under one-on-one instruction. Still others were learning the basics of the scroll saw. Need some carving or intarsia advice? It was all here for the asking. An entrance fee of eight dollars gave walk-ins access to all these areas, plus the vast NWA/AWA-combined Instant Gallery.

The NWA's portion of the Instant Gallery (Showcase) was an inspiring, humbling, and challenging experience, not to be missed by woodturners attending TT. The offerings covered areas of woodworking from boatbuilding to woodturning with many stops along the way. I could have easily lost myself and spent a good portion of the day there, but the turning demonstrations beckoned, so that's where I focused my attention.

An AWA volunteer and his wife enjoy exploring the Instant Gallery.

Sunday after lunch, activity began to slow down. The rotations were still well attended, but not maxed out, hallways less crowded, and the excited hubbub of conversations noticeably quieter. Vendors began to reduce prices on some items—the wise shopper might find that coveted item at a discount.

My trips to the Instant Gallery told me I'm still a novice turner, but that doesn't dim my enthusiasm for working with wood. I'll be back to Totally Turning in 2012. I highly recommend the Showcase and Totally Turning event, or if not this regional symposium, I guarantee that attending any of the others will fuel your engine. ■

Jake Debski is retired from a jack-of-all-trades work life. His lifelong hobby is flat woodworking. He began turning and joined the Western New York Woodturners II chapter in 2001.

Many pictures of Totally Turning/Showcase are available. Here are two links: totallyturning.com and nwawoodworkingshow.org. A video of the Instant Gallery can be found at youtube.com/user/jschnell1203.

Future woodworkers receive hands-on direction and encouragement.

Attendees are offered expert carving advice.

Richard Raffan points out the finer details of a turned element.

Tool Handles

Bill Neddow

Gouges, skew chisels, and scrapers are the interface between a woodturner's hands and the wood. Well-designed tools add greatly to pleasure in turning. Essential to a well-designed tool is its handle. Handles should be comfortable to grip, improve tool control, reduce stress to the body, and ensure safety.

When I first started turning, I bought Sorby tools, which I happily used for years. The handles had the typical English design: long curves with a bulge just behind the ferrule and a smaller gripping area where the handle is held most of the time. Toward the end of the handle, the diameter increases again, to warn that your hand is nearing the end. The handles on Sorby's standard bowl and spindle-roughing gouges were all approximately 1¼" (32 mm) at the waist. The smaller spindle gouges were about 1" (25 mm).

I started questioning this standardization a number of years ago after seeing David Ellsworth turn a hollow form. The handle on his tool was substantial. It was much larger in diameter than normal and over two feet long! He explained that the additional diameter gave more control over the twisting of the tool. I started applying the principle to my bowl making and discovered that a larger handle (about 1¾" [44 mm] diameter) meant I could control the tool better. A larger handle also lets me relax, yet still maintain control over the tool. Gripping tightly to control the torque results in white-knuckle turning, something everyone warns against. If you are using a small-diameter handle and fighting the torque, consider acquiring tools with larger-diameter handles.

After I started using larger handles, I found I could turn all day without waking up the next day with pain from cramps in my hands. My current bowl-roughing gouge has a handle that is 1¾" in diameter and is 18" (45 cm) long. It is a solid 1½" (40 mm) aluminum bar with a foam sleeve, perfect for the job. I would not use it to turn pens, though. For pens, the handles on my detail gouges are a little fatter than normal and shorter to provide fine control for adding details. Everything has an optimum size, but in general a fatter handle is superior.

Large-diameter handles

If you want to try a larger-diameter handle, make it yourself or search for small manufacturers; most major manufacturers understandably make one-size-fits-all handles. My first oversize handle came from Russ Pilgrim, a woodturner in Vancouver, Canada. His handles are aluminum with a vinyl grip, are 1¾" diameter, 18" long, and have a .530" bore on one end and .640" bore on other end to fit ½" (13 mm) and ⅝" (15 mm) gouges. His

Although there does not seem to be much difference in the diameter of the handles, the top one gives dramatically better control of torque with its ½" [13 mm] larger diameter.

Metal handles are popular. The front two are aluminum—the closest one is a Glaser handle with a negative-rake scraper, purchased from Stuart Batty a few years ago. Next, is a Doug Thompson handle. Behind it is a Kelton steel handle (they now make an aluminum one as well) and the back handle is shopmade from a piece of iron pipe (polished) with an interior diameter of ¾" (19 mm). It is sleeved down to ⅝" (16 mm) at the other end. The foam is from a recycle bin at a surplus store.

We woodturners need many different sizes of handles to work efficiently. The big tool is ½" (13 mm) larger in diameter than the norm, giving a much better and more comfortable grip for removing large shavings. Below it is a small skew chisel with an appropriate-sized handle for delicate tool control.

handles were the result of collaboration with Curt Theobald. Russ says that his larger-diameter handles significantly help woodturners with large hands, carpal tunnel syndrome, and/or arthritis.

I have approached other manufacturers about making larger-diameter handles, but only a few of the smaller manufacturers responded. I have several handles from each of these shops. I also make my own handles. The actual design is not important. I like a fairly straight handle (like a tube) because I want the maximum diameter to be available on the middle of the handle as well as at the end. That way, I can have the maximum amount of grip and torque control no matter where I hold the tool.

Handle length

Tool length is also a factor in comfort and safety. Optimal length in a handle will provide a balanced tool, one that allows turning to be done with minimum physical effort and maximum tool control. For hogging wood away, a longer tool handle offers more leverage, which results in less effort to control the cut. You can use this simple fact to dramatically cut down the amount of shock and vibration that your body has to absorb, especially when turning out-of-round pieces. A long handle can be tucked tight to your hip and your hips and legs can help control the tool, useful for roughing out the outsides of bowls and roughing down spindle stock.

But you have to do everything in moderation. If a tool handle is too long, the end will contact the lathe bed, especially when coring out the center of a bowl. I have a lathe with a 24" (60 cm) capacity—an 18"- (45 cm-) long handle works well for heavy-duty roughing. On a standard 12" (30 cm) lathe, however, the end of the tool often hits the bed when I am hollowing out the inside of the bowl. Shorter handles were designed in an era when lathes with 12" swings were the norm. Lathes have larger capacities in recent years; you might want to try longer tool handles.

For spindle gouges and lighter-duty gouges, I prefer a shorter handle. They do not need to be tucked against my hip. My spindle gouges range from 12" down to 6" (15 cm) long. The shorter tool handles will allow you to work in front of your body, which is a great advantage when working with smaller items. It also makes it easier to switch hands while turning. The finer the work, the smaller the tool should be. A shorter handle balances the tool.

Vibration

A heavy tool handle can help reduce vibration, which will make turning more comfortable, as well as reduce catches. Catches can happen when vibration accelerates into a bounce, which can happen in a split second.

Weight for damping vibration can be increased by adding lead or steel shot to the handle. A quick search of the Internet shows that machinists ▸

These are the parts that go into making my favorite style of tool handle. The hose and aluminum pipe come from a discount machine-shop supply house. The block of aluminum is from a large chunk I found in a junkyard. The wood is camatillo (rosewood), meant for a bottle stopper. Any hardwood (or aluminum) will do. The screws are the same size I use in other handles.

Two well-made aluminum handles. The one on the bottom is the standard Oneway handle. On the top is one made by Russ Pilgrim from Canada. It is ½" (13 mm) larger in diameter and 6" (15 cm) longer than the Oneway. I would use the Oneway for tools up to ½" diameter and the Pilgrim on larger tools, for more comfortable tool control.

More aluminum handles. In front is a beautifully machined handle by D-Way, with a sleeve in it to fit smaller tools. Next is a collet handle from Serious Tool Works, which I bought many years ago. Next is the Oneway handle, then my own shopmade one. The last is the big handle manufactured by Russ Pilgrim.

This is a lovely shopmade handle, but the tool steel sticks too far out. The length entices a turner to reach way out over the toolrest, and doing so, the tool will vibrate like a tuning fork.

There are many types of ferrules. In front is a standard ferrule in a wood handle. Behind is a Hosaluk ferrule, followed by a Oneway ferrule, and then a shopmade one out of an Oilite bearing. The back one I would not recommend, although it seems to have withstood the tests of time—the handle appears to be part of an old sledge-hammer handle, and the ferrule is simply a piece of wire wrapped around it.

universally agree that lead shot is more effective than steel shot.

Personally, I do not use lead shot and avoid really heavy handles. For the little deep hollow turning I do, I use a captured bar—it provides fingertip control without white-knuckle turning.

I have used shot in a handle and own a large solid-steel handle that I used for roughing out large bowls. I found that although it did help me balance the tool when I was reaching out over the toolrest, by the end of the day, my arms were very tired. After paying attention to the amount of time I was simply holding the tool as opposed to making cuts, I discovered that I was simply holding the tool more than a quarter of the time. This may not be important to a hobby turner, but to a production turner, that tool handle gets heavy by the end of the day. Some turners, however, like a heavy handle and claim it helps overcome problems with arthritic shoulders and backs.

There is another effective way of reducing vibration: keeping the toolrest as close as possible to the wood. It also means you have more leverage and have less need for a heavy handle in order to achieve balance. This is my solution to the vibration problem. I take time to set up my toolrest, getting it as close as reasonably possible to the wood, especially on out-of-round pieces. I also reposition the toolrest regularly. If there is a 2"- or 3"- (50 mm- or 75 mm-) gap between the toolrest and the wood, the tool's leverage drops dramatically and there is less tool control. The balance of the tool has changed. When you are cleaning out the inside of a very deep bowl, a curved toolrest will minimize overhang.

There is yet another way of reducing vibration. Instead of filling the tool handle with shot, shorten the length of the tool steel that protrudes from the handle. The tool steel can act like a giant tuning fork if it sticks out too far, vibrating with each cut. A removable handle will allow different combinations of tool-to-handle length to arrive at the best solution for eliminating vibration. Having less tool shank exposed also gives your left hand something larger to rest on than the tool shank. This cuts down on hand cramping from grasping a thin tool shank.

New materials

A composite made by embedding carbon fiber, Kevlar, or other fibers in a polymer, such as epoxy, is used in racing bicycles for strength and to dampen vibration. It is also used to build canoes capable of withstanding massive shocks and for golf club and tennis-racquet handles. Stuart Batty displayed carbon-fiber-handle prototypes at the Saint Paul symposium; they looked interesting. Glenn Roberts, an Australian woodturner and tool developer, is also working on a carbon-fiber design. (The Kelton ER handle is based on his original concept.) I hope other tool developers explore this material. If the composite materials can dramatically reduce the shock of hitting a golf ball and stand up to the pounding of a racing bike, they should work for woodturning-tool handles.

Handle core

There are many materials that can be used as a core for a tool handle: solid round bars of aluminum and steel, tubes of aluminum, steel, or black iron pipe, plastic pipe, and wood. On a wood lathe, it is easy to turn a piece of aluminum into a sleeve that will be the right size for the cutting tool and will fit into your chosen core.

Some manufacturers use solid aluminum or steel for the core and simply drill out the center for the tool.

Even plastic pipe (Schedule 40) can be used as a core for a tool handle. Hunter Tools makes an aluminum sleeve to fit this pipe and to fit your

My favorite tool handle

This is my favorite tool handle. It has the characteristics I need for the type of woodturning I do. I make bowls in the 12" (30 cm) to 20" (50 cm) range. If I were making jewelry, hollow forms, or smaller or larger bowls, the handle would be different—in some cases, radically.

- The handle is 1¾" (45 mm) in diameter, larger than most woodturners use. I have been a production turner for years; ergonomics, efficiency, and comfort are important. White-knuckle turning decreases productivity, and the increased diameter of this handle gives me greater torque control. Only a minimum of effort is required to make those long shearing pull cuts that remove masses of wood.
- It has a soft grip, in this case, plastic. Foam rubber is also a favorite. The reason is comfort. I do not end up with blisters, holding on to something hard for eight hours. The grip I can get on these softer handles means that I am not fighting torque trying to hold on to a shiny, slippery surface.
- The tool steel is easily and quickly removed with one twist on each of two screws holding it in. A collet may be faster, but they have a tendency to seize sometimes if you have been doing a lot of heavy work with them.

- The handle is hollow (basically, a hollow aluminum tube with a piece of solid aluminum bar 2½" [63 mm] long, and fitted to one end). This means I can bury the shank of a new tool deep into the handle, cutting down the length of the exposed steel and eliminating much of its tendency to vibrate.
- It is lightweight. I am not carrying around a heavy weight all day, tiring out my arms and shoulders. I achieve balance in the tool by keeping the toolrest close to the wood, creating the most advantageous fulcrum. I do not need weight to create an ideal fulcrum.
- It is long enough to rest against my hip to give me an efficient cutting stance when making those big cuts. It is short enough at 14½" (37 cm) to clear the bed of my lathe when hollowing out the center of the bowl.
- Because the handle is hollow, I can add ballast in the form of lead shot to the back end of the handle if needed. I simply remove the press-fit cocobolo plug at the back end, force a cork or other soft compressible material a little way into the handle, add the shot, and press-fit the plug back into place. I have never needed to do that.

Additional features I would like to have

- Ribs or flat spots running the length of the handle would help keep the tool from rolling off the lathe bed. Ribs would also make my grip on the tool more efficient by increasing the amount of torque I can control with ease.
- I would like it better machined. I am foremost a woodturner and secondly a machinist, and it shows. Although I am proud of this handle and use it all the time, I would be even prouder if it looked more professionally made.

chosen tool. You can leave it light, or make a wood plug for the back end and fill it with lead shot.

Of course, there is also wood, the traditional material. Just make sure the grain is straight; a piece of wood with the grain running out the side is likely to splinter and break if you get a catch. Wood handles can also be bored out to accept shot to make them heavier. If you like heavy handles, you can also choose a dense wood like cocobolo. For a lighter-weight handle use ash or maple.

Handle surface

The surface of a tool handle affects control and comfort. Rubber or foam rubber are excellent materials—comfortable, nonslip, and optimal for tool control. Both are warm when the shop is cold.

I was concerned about foam rubber deterioration when I bought the first handle covered with it years ago, so I used it very little. Then I saw a local manufacturer assembling a handle with a foam cover. Several people were in his shop and he became distracted when he went to pull the foam over the aluminum bar. The lubricant on the aluminum dried, he got the foam halfway on, and it stuck. His friends pitched in to help. Two guys held the handle while a burly fellow grabbed the edge of the foam with two pairs of needle-nose pliers. They pulled and pulled. It would not budge. So, they tried to turn the foam inside out to pull it off. The foam stretched at least 4" (10 cm) out from the handle before it let go. I thought the foam sleeve was ruined. I was surprised when the manufacturer picked it up off the floor, lubricated the ▸

HannesTool collet handles provide a fantastic grip. They are made with an injection-molded cover that gives firm control and keeps the tool from rotating in your hand. The three ribs can be positioned so your thumb naturally falls into one of the grooves, enhancing the control even more. The ribs keep the handle from rolling off a flat surface.

When I first heard of the Kel McNaughton ER System of handles, I thought it might be a sales gimmick—but it is a brilliant idea. The System provides versatility, allowing turners to customize the perfect handle for the job.

Many of the components of the ER System can be combined. Here, an ER16 handle has been attached to the back end of the ER25 handle, and a torque-arresting handle added to the side.

The McNaughton Torque Arrestor handle has been added to the end of an ER16 handle and the two have been added to the biggest handle in the System.

The McNaughton System uses universally available ER collets, so you can get either metric or imperial collets to better match the tools you are inserting into the handle.

These are sturdy collets and they have a clamping range capacity of about 1 mm (.04"), so you should be able to find one to fit almost any tool.

If you buy collets from a tool supplier (rather than from McNaughton), check the manufacturer's specs carefully. Some manufacturers identify their collets by *actual* range. For example, 18–19 indicates that the collet will accommodate from 18 mm to 19 mm. Others use a single number such as 19, which indicates the upper limit of the collet. Yet others may identify the collet by its mid-range using a single number: 19 mm would accommodate a shaft range of 18.5 to 19.5 mm.

aluminum, and slipped the foam on again, this time all the way. The foam was perfect, and I have been using this very tool for several years. The foam is still in excellent condition. Many of my tools now have foam covers.

Plastic (often in the form of clear reinforced tubing) is also a good choice. It does not feel as warm as rubber; however, it provides a good grip.

Metal, whether aluminum or steel, is hard and cold. Cold handles are not pleasant in a Canadian winter. If you live in the south, though, a cool handle might be an asset. I find aluminum or steel handles can be slippery, which does nothing for tool control. Some people wrap this type of tool with golf club or tennis-racket tape, which gives a good grip and is also lightly padded.

Wood is the old standard. It has a solid feel, and a good grip is possible, as long as the surface is not sanded ultra smooth. My wood handles are sanded to 100 grit and many do not have a finish. They may not be pretty, but they are practical.

Putting flats or ribs on a handle is a way of enhancing the tool; some commercial models are available with three or more flats or ribs on the plastic or metal surface. Shopmade wood handles often end up with at least one flat, which will keep the tool from rolling off the bed of the lathe. Flat sides on an otherwise round handle will improve grip.

Ferrules

Ferrules are meant to keep wood handles from cracking or breaking and are necessary for safety. They can be made from many different objects, including copper and brass pipe, wire, springs, and compression fittings (see Tim Heil's article, "Fancy Ferrules for Everyday Use," *AW*, vol 26, no 2). I use a thick Oilite bearing of an appropriate size. The thick bearing provides for sufficient threads for setscrews.

Removable handles

There has been an upsurge of interest in recent years of developing tools that can be easily removed from their handles. Collet systems have become popular. A quick twist, and the tool releases from the handle with no need for Allen wrenches and no lost setscrews. When you change tool sizes, however, you have to change the collet. Some manufacturers use industry-standard ER collets. This is a nice feature. You can buy extra collets from most machine shop suppliers to fit those oddball-sized shopmade tools you may have. Some manufacturers simply cut slots in the tubular metal of the handle so the handle material will flex and squeeze onto the tool as you tighten the nut. In order to use different-diameter tools, you have to have a sleeve that fits onto the tool, to accommodate the diameter of the hole in the handle. A setscrew usually holds these sleeves in place, similar to the method described later for the cam-lock systems. Also, some after-market tools are slightly larger than the standard collet sizes, and they might not fit in the handle. A few passes on the belt sander to reduce the tool diameter will solve this, but that will do nothing for the beauty of a tool.

Cam-lock systems also work well: Place the tool in the handle, twist the cam cover, and the tool is secure. With the old systems, however, you needed adaptors on many tools—the cam system would only hold one size and adaptors were needed for different-diameter tools. Also, these old systems sometimes used a setscrew to hold the adaptor onto the tool. This meant dealing with Allen wrenches and lost screws. I have not seen the new systems that are being developed, but I am hoping the manufacturers have addressed this problem.

Some metal handles are glued onto tools, for example, Glaser and Hannes.

Setscrews, however, are probably the most customary way of securing a tool into a steel or aluminum handle. Using setscrews means the handle is easily shifted to another tool when the original tool wears out. As stated before, it also allows you to change the handle easily to get a properly balanced tool/handle combination for the job at hand. It is an efficient way of marrying tools and handles.

As with other removable handles, if you want to change the diameter of the tool to a smaller one, you will need a sleeve. Most manufacturers can provide one and the problem of additional setscrews is avoided by simply drilling oversized holes in the sleeve and allowing the existing setscrews in the handle to extend through the sleeve and grip the tool.

There are other ways of holding steel in a handle coming onto the market. Stuart Batty has displayed a system that works something like a Morse taper with a draw bar. There is a Morse taperlike hole on the end of the handle into which the tool fits. On the end of the tool, a threaded area screws into a similarly threaded area inside the handle.

Glaser HITEC has another couple of systems. In their mini-tool system, they seem to have an offset pin on the end of the tool steel that plugs into a hole in the handle. This keeps the tool from twisting. To keep the tool from falling out, there is a cove machined on the tool steel (in some cases, the photos on their website show a bead) that fits into some sort of a compression fitting in the handle. They also show a modification of this on their website, which has a more square knob on the end of the tool steel that fits into a similar hole in the handle.

Doug Thompson and Jimmy Clewes are working together on a prototype that involves a cam-lock system for holding the tool in the handle. Hannes Tools has a new collet system.

There are also several products on the market for making wooden tool handles into quick–change handles rather than gluing the tool into the wood. For example, Oneway produces a ferrule that allows you to mount a tool into a wood handle. To use it, you cut a taper on the end of the handle using a special template provided, then simply screw the ferrule onto the taper. The Hosaluk version involves drilling a hole in the end of the wood handle big enough for a sleeve on the ferrule to fit. The tool slides up through the ferrule and up through the sleeve into the handle. The Hunter solution is sized so you can glue a piece of Schedule 40 plastic pipe as a handle on the aluminum sleeve.

Conclusion

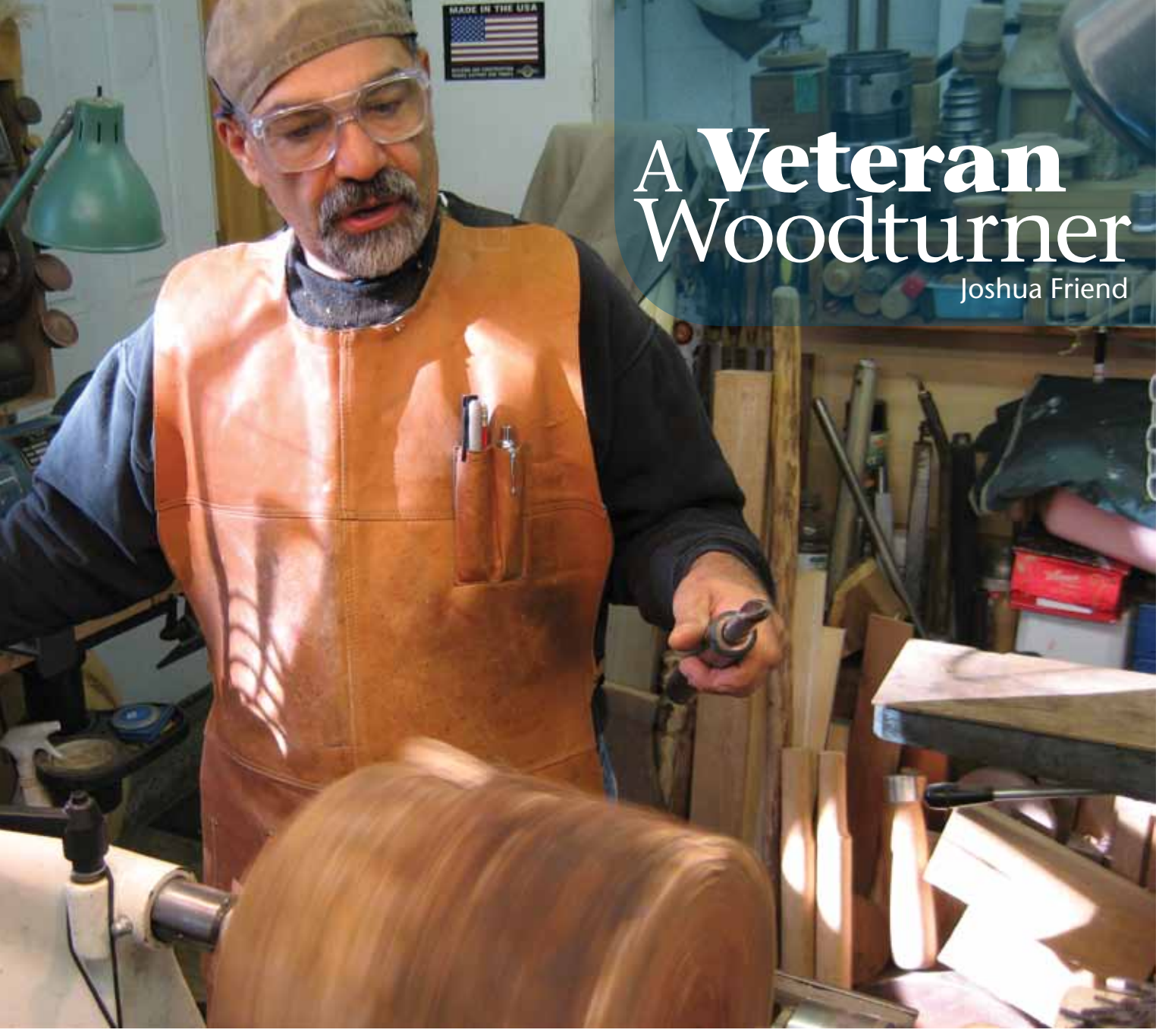
Manufacturers are starting to focus on tool handles; expect significant advances in efficient, comfortable, and safe handles in the near future. There may be a downside, however. If you buy a tool, you may have to buy a handle from that same manufacturer, one that cannot be used on any other manufacturer's tools. If you are planning on outfitting yourself with a complete set of these tools, it is not a problem. Understandably, manufacturers need to protect their inventions with copyright or patents. Doing so will protect inventors in the short term. However, that system will not be adopted as an industry standard; other systems will continue to thrive.

We all have a favorite handle or group of handles. Our preferences are based on experience and what we find works for the type of turning being done. The weight, diameter, and length of a tool's handle can come together to create the perfect balance for a particular job, whether it is hogging wood off the outside of a bowl or creating a tiny captive ring. Be aware of the forces at play and know that you can be in command of them. Your turning experience can be safe, comfortable, and fun. ■

Bill Neddow spends his retirement creating bowls for galleries and taking part in studio tours. He also does some demonstrating. Bill considers himself a semi-production turner, following themes in his bowl designs, but trying something different with each one. He is fascinated not only by how to do something but in why it works, a byproduct of thirty years as a writer, editor, and publications manager. His website is billneddow.com. You can email him at bill.neddow@sympatico.ca.

The SB Woodturning Taper-Lock Handle System has a composite handle, the best material available for absorbing vibrations. With its six longitudinal lobes, the handle is designed not to roll off the lathe. The lobes also help provide a secure grip. The handle is lighter than wood and stronger than steel. The G2 grey iron tapered bolster grips the tool and provides a total of 6 square inches of secure contact between the handle and the bolster. Weight, such as lead shot, can be put in the handle to give the tool the perfect balance.

Glaser HITEC extruded handles are made from aircraft-grade 6061-T6 aluminum alloy and also have a no-roll shape. This handle was introduced by Jerry Glaser in 1985 and now features a powder-coated finish. Weight can also be added to this handle.



A Veteran Woodturner

Joshua Friend

Gualberto "Gil" Malave, a disabled Marine Corps veteran who served in the Vietnam War, stays positive and active in spite of chronic post-traumatic stress, the challenge of his life. His two passions, woodturning and Tai Chi Chuan, give him focus and provide connections and grounding. He teaches and practices both. His mission is to make himself accessible, as an example and a guide, to other struggling veterans and civilians. His message: With an open mind, there are always possibilities for recovery, balance, and meaning.

Tai Chi Chuan is an ancient Chinese martial art that combines body movement with meditation, utilizing continuous circular motion. Just as an off-kilter mass of wood is balanced and made to run true on the lathe, Gil practices Tai Chi to align himself with a sense of peace—physically and emotionally. "The body standing straight up with legs together is not stable. You could easily push me over," he explains. "But if you put the legs out like a triangle with a broad base, you become rooted. From this position, with the tool held as part of you with the handle at your hip, you can rotate and use your whole body to cut the wood easily and safely."

Physically active

Gil's approach to lathe work incorporates a physical awareness that is enhanced by practicing Tai Chi Chuan. "It is about being in the moment, mentally and physically," says the 59-year-old turner. Demonstrating his solid stance at the lathe, he comments, "This makes lathe work safer for one thing, but also, once the basics have been

mastered, makes way for creativity." And by practicing Tai Chi regularly, Gil has learned that staying physically active is key to dealing with mental and emotional issues. He explains, "If you don't feel good about your clothes, you go change your clothes—you can do something about it. And similarly, if you don't feel good about your mental or emotional state, you can change that by changing your physical state."

Just last year, Gil took up windsurfing, a move that typifies his active approach to life. Although he has had a hip replacement and no longer runs, he continues to ride his bicycle. He goes offshore fishing and restores older cars—currently a 1980 MGB. He also rides a motorcycle as a proud member of Rolling Thunder, a veterans' group whose mission it is to publicize ongoing POW/MIA issues and to help American veterans from all wars. Gil has an absolutely contagious energy for learning new things and staying engaged in life, which have been crucial ingredients in his post-war therapy. "What is the altitude of your attitude?" he asks with a smile.

A teacher and a student

Gil says that when he was young he was not a good student, but now he never wants to stop learning and has become an effective teacher. The Veterans Administration helped Gil get his start in woodturning in 2003 by paying for a semester at Buck's County Community College in Newtown, PA, where he took his first course with Mark Sfirri. Sfirri opened up the doors to woodturning for Gil, not only teaching him the basics but also taking him on field trips to museums and exposing him to many different aspects of the craft. Sfirri recalls, "Woodturning was in the right place at the right time for Gil, who had paid his dues dearly [in the war]. As a woodturning student, he embraced all of it, so much so that the craft became an opportunity for him to reinvent himself. It was really a rebirth for him."

Since that enthusiastic beginning, Gil has gone on to become the president of his woodturning club, the New Jersey Woodturners, which meets in Roseland, NJ. He exhibits his work frequently and has won several awards for his woodturning—most recently a gold medal at the 2011 National Veterans Creative Arts Festival in Fayetteville, AR.

The VA also bought a lathe for Gil to help him get started, for which he remains extremely grateful—so much so that now when he talks about where he has come from and his ongoing recovery from post-traumatic stress, it is obvious that his love of teaching is a way for him to give back and continue healing. To this end, his shop in Raritan, NJ, is well equipped for woodturning instruction. With five different-style lathes, he uses each for teaching various aspects of turning. For example, his Stubby is uniquely appropriate for larger faceplate turning, with its short bed providing superior access. His General midi lathe works well for smaller spindle work, and the Oneway 2436, with extended bed for longer, larger spindle work and faceplate work on the outboard side is ideal for large turnings. Generally, Gil likes to teach two students at a time so that he can provide ample attention to each, moving back and forth between them as needed. Gil is available and accessible to anyone who wants to learn woodturning, but he hopes to formalize his teaching and open a woodturning school. To accomplish this, he is working on finding financial grants and broader exposure.

Gil Malave's love of the craft is contagious; his skill, obvious. And his gratitude-based love of teaching is absolutely heart-warming. Those qualities are as effective as any tool. For more information about Gil, visit his website at studios202south.com. ■

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

Untitled, 2009, Ambrosia maple, 7" × 7" (18 cm × 18 cm)

Untitled, 2009, Quilted maple, 14" × 7" (36 cm × 18 cm)

Historic Fort Snelling Flagpole

Karen Nielsen

The Minnesota Historical Society needed a new flagpole for Historic Fort Snelling by Memorial Day 2007. After selecting a design that replicated a 19th century, two-part ship's mast, they searched for a craftsman to make the flagpole. Enter Charles (Charlie) Nielsen, owner of Nordic Woodworks (nordicwoodworks.com).

Charlie is a fine-furniture maker and cabinetmaker who also has experience in the marine industry. First, Charlie needed a lathe to turn the two, 4,000 lb (1,800 kg) Douglas fir logs. He teamed up with friend Dan Gates, a machinist, and they built a 60'- (18 m-) long lathe in the old Calvary barn adjacent to the Fort. They constructed the lathe bed with I beams, a hydraulic pump, a motor for the headstock, and assorted electrical parts and overhead cranes. The lathe soon boasted a crawler, fitted with a self-feeding dado blade cutter. When in operation, the crawler traveled along the I beams at 4' (120 cm) per hour with the logs spinning at 10 rpm, removing a ½"- (13 mm-) deep cut per pass.

Charlie and Dan turned and tapered the first log (the main mast) from its initial diameter of 17¼" (44 cm), down to a 12¾" (32 cm), then squared off a section to 9¼" (23 cm). The finished length was 50' (15 m). They tackled the second log (the top spar mast) next, and turned and tapered it from 12¾" (32 cm) down to 4" (10 cm) with a section also being squared off to 9¼" (23 cm). Its finished length was 42' (12.8 m).

The squared-off sections would run for 7' (2 m) on each log, the length that fits into the trestletree assembly, a series of rings and shrouds that hold the two masts together. A lightning rod was installed and the masts were painted white.

The mobile crane needed to hoist the flagpole was too large to fit into the Fort, so the flagpole had to be assembled outside the walls. The crane hoisted the flagpole over the wall and set it into its mounting base near the Fort's round tower. It proudly flies a 20' × 30' (6 m × 9 m) replica 24-star garrison flag. ■

Cats-paw cradles. The headstock is at the far end.

Dan Gates trues the cats paw, a circular ring used to support the log and find center.

Headstock.

A router jig was used to mill flat surfaces, which would fit into trestletree.


Dan monitors the self-feeding carriage cutter.


The crawler is used to turn the flag head on the topmast to a final diameter.


Charlie trims excess stock before the final cutting of the taper for the upper pole.


Lower flagpole is being primed and fitted with the trestletree assembly and the upper pole is mounted onto the lathe.


The upper and lower poles are test fitted in the trestletree. Cranes lift and support the assembly.


The upper pole is mounted onto the lathe and a taper is being established.


The flagpole is prepared to fly over the wall.


The lifting strap is removed.


Charlie reviews the completed project.


Memorial Day dedication at Fort Snelling, 2007.

Turning to the *Next* DIMENSION

Real Movement in Turned Objects

Peter Rand

Kinetic woodturnings are an exciting, yet-to-be-explored goldmine of artistic fun and excitement. Adding real movement to turned objects provides a fundamental, rich quality that produces a qualitatively different perceptual and emotional response than does implied movement. The difference is similar to, but greater than, the difference between seeing a photo of a woodturning and experiencing it in real life. Moreover, just like other artistic qualities, different kinds of motion can evoke a variety of responses.

I make kinetic woodturnings and have learned much over the years. The fundamental aspects of having a piece of wood art actually move make the possibilities limitless. One major impediment to the advancement of kinetics has been how to mechanically produce movement. I describe two mechanisms that I developed for adding movement, ones that anyone can make.

Peter Rand, *Playbears*, 2005, Ornamental cherry, dye, 13" (33 cm) stride. Various static arrangements by viewer are stabilized with embedded magnets.

Movement as an artistic quality

Movement is an artistic quality, as are form, color, and texture. Throughout time artists have been compelled to provide real movement in their art. Conveying implied movement is well established in the art world; however, incorporating real movement has lagged far behind, primarily because of the technical challenges. The compulsion remains, and the time has arrived when the making of kinetic woodturning is feasible.

Many elaborate and wildly ingenious moving mechanical devices have been created, some purposely Rube Goldbergesque. Often, movement is the primary purpose of these pieces and its absence can leave a contraption that lacks aesthetic virtue. I have focused my interest on woodturning and wood art, where movement is intended to enhance. As one preeminent woodturner said, "Ah yes, just like a beautiful wind-blown tree is still beautiful, even when the wind is not blowing."

Effects of movement

Movement of or within a piece of art is irresistibly attention-getting. It produces a unique perceptual and emotional response. Art that moves is rich in possibilities: It can be unexpected, amusing, soothing or disturbing, thoughtful or perplexing. For some, a constantly moving piece would be disturbing. A similar reaction is possible to color, or shape, or design. My experience with movement is that with time, the movement becomes elemental to the piece. Disturbance then arises when the movement stops, as when the pendulum of a grandfather clock stops moving or a clock stops ticking.

The how of movement

The history of kineticism (see sidebar) illustrates that developing aesthetically acceptable mechanisms for creating movement in three-dimensional art has been difficult, which limited possibilities. Many artists gave up their efforts. Even Alexander Calder, renowned inventor of the mobile, abandoned unsightly mechanisms for natural air currents. Today however, as predicted by Naum Gabo (see sidebar), modern electronics and miniaturization provide the means of producing movements while hiding the mechanism from view. Descriptions of two such mechanisms are given in the sidebar. The suppliers of these mechanisms have simplified them for easy application by nontechnical users.

Parallels in two-dimensional art

Movement in two- and three-dimensional art has interesting parallels. The former has not developed any more quickly than three-dimensional art, even though video technology has existed for years. (I exclude movies and videos, whose storytelling objectives are quite different from making a moving piece of flat art.) Today, however, kinetics is emerging in two-dimensional art. Among others, Bill Viola (billviola.com) is having a major impact. He depicts extremely slow-moving artistic scenes, which are mesmerizing, a confirmation that movement can dramatically affect a viewer's experience of two-dimensional art.

Learning and teaching the aesthetics of movement

My personal explorations in making kinetic woodturnings have revealed fundamental qualities about the aesthetics of movement: slow versus fast versus variable; rhythmic versus random; motion that deforms or reveals the object; and motion that manipulates negative space. Within the whole aesthetic of an artistic piece, exploring these elements of movement is interesting and challenging, varied and complex.

Remarkably, real movement is missing in the teaching and discussion of sculpture and design. "Shouldn't movement receive the same aesthetic attention as form?" asks Ben Hopson, a recent graduate of the Pratt Institute of Design in New York. Because movement was not a subject in his program of study, he is now creating the first curriculum of Kinetic Design, which includes a language for describing the aesthetics of movement (benhopson.com).

Exploring kinetics in woodturning

The field of kinetics is wide open and can be exciting for the venturesome woodturner. Several examples of contemporary kinetic woodturning illustrate different aspects within a large range of possibilities. They are ordered ▸

Peter Rand, *Walumispheres,* 2004, Walnut, aluminum, 2" to 5" (5 cm to 13 cm) dia.

Siegfried Shreiber, *Mowento Pendulum* and *Lotus Bowl,* 2005, Horse chestnut, maple, 23" × 7" (58 cm × 18 cm) (Pendulum), 3" × 30" (8 cm × 76 cm), (bowl). Place it in the correct position, blow lightly on the stem and the pendulum will start to swing slowly toward the center of the base, gaining momentum as it twirls.

Photo: Center for Art in Wood Archives

in increasing complexity of the mechanism that produces the movement, from manipulation by the viewer to the use of advanced electronic sensors, microcontrollers, and servomotors.

Kinetics by observer manipulation

Action by a viewer to change the shape or the juxtaposition of pieces into a variety of static configurations can be considered a form of kinetic art and many examples exist. A viewer's action to set a piece in motion is more rare. An example of the former can be seen in *Playbears*. Here, two woodturned sculptures, based on the femisphere (a complex geometric form), can take on many very different relative positions. Aesthetically, they vary from stable to unstable, cozy and warm to aggressive, from unconnected to erotic. Interpretation and positioning are in the eyes and hands of the viewer. This kind of participatory kinetic art is rich in possibilities and is often used by artists.

An example where the viewer sets woodturnings in motion can also be represented by femispheres. A *femisphere* is a form conceived 35 years ago by J. Roberts, an English joiner. As recently as 1999, femispheres were discovered to be a new shape by mathematician Ian Stewart (*Scientific American*, October 1999). Femispheres are addictively tactile and beg to be fondled for hours, like worry beads. Femispheres can be set to roll in an interesting wobbly path on any surface. They also roll as simultaneously as perfect spheres on surfaces with the tiniest slope, even off gallery shelves to the dismay of customer, gallery owner, and artist!

Another example where the viewer sets woodturnings in motion is represented by the work of Siegfried Schreiber from Germany. The delicate balance of his minimalist pieces makes their motion intriguingly complex and last an unexpectedly long time. Other examples (siegfriedschreiber.de/en/works/

(Far left) **Peter Rand,** *Conspirators,* 2010, Boxelder, bleach, paint, 32" (90 cm), tallest form. The positive profiles and negative spaces are made kinetic with independent rotation of the individual pieces by embedded mechanisms within the bases of the forms.

(Left) **Giles Gilson,** *Cirrusmodres,* 1978, Laminated wood, 10' × 15' (3 m × 4.6 m). This mobile relies on air currents for movement and requires a 30' (9 m) space for its movement. See more of Giles' work at gilesgilson.com/sculpture.htm.

kineticobjects/index.html) illustrate the use of pure motion with aesthetically pleasing geometrical pieces. Here, motion is unrelated to any narrative of the piece and is a purely abstract quality, determined by the relation of weights and curves of the form.

Motion relying on air currents

Giles Gilson's kinetic pieces in his Cloud Series echo the famous mobiles of Alexander Calder. Interestingly, Gilson's elements balance above each other rather than below. Motion and position of the elements mimic clouds.

Mechanical mechanisms

In the accompanying sidebar, I describe two kinds of motor-driven Lazy Susan. Each can be used in a number of ways to produce motion: to rotate a base, to rotate an individual piece, or to provide a rotary impulse to set a piece in motion. In all configurations, the mechanism is not visible. Charlie Belden is a contemporary woodworker who is exploring many different technical ways of animating turned pieces, including incorporating light and sound. (youtube.com/user/charlieb1946)

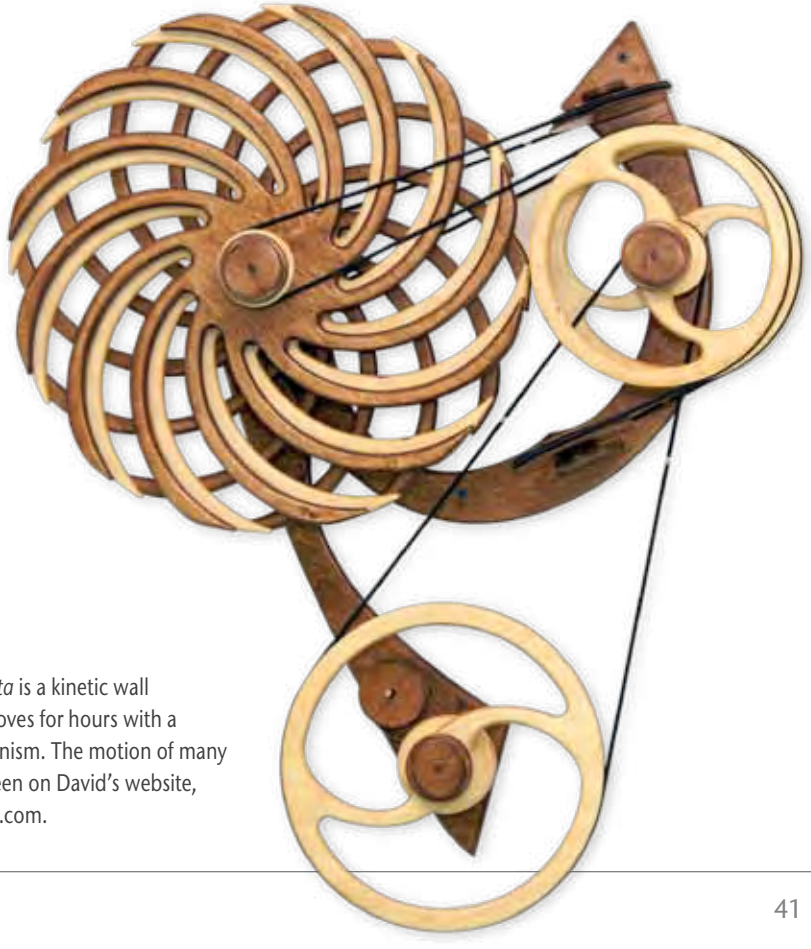
Simply rotating a single piece in order to view it at all angles is not usually considered kinetic art. However, rotating two forms that are shaped and positioned so that the negative space between them forms an integral part of the piece reveals a new dynamic. When the objects in *Conspirators* are rotated separately, both the positive and negative profiles change. If each piece is rotated slowly, randomly and automatically, over time one can view an ever-changing complement of configurations, which otherwise defy imagination. (This triptych can be seen in motion at RPRkinetics on YouTube.) Almost completely unexplored are the rich possibilities in designing eccentric positive profiles, their related negative spaces, and the manner in which movement renders both of these dynamic.

Peter Rand, *Pas de Deux,* 2011, Walnut, aluminum, 4" (10 cm) dia.

The base is slightly concave and sloped. Its slow rotation animates the two pieces.

Providing a continuously changing slope can animate pieces that rock or roll. *Pas de Deux* shows such a kinetic sculpture. Sphere and femisphere intermittently rock and roll around each other, usually in contact, over time revealing all grain, pattern of aluminum banding, and the chatoyances. The top of the plinth rotates, slowly and independently of the base, using an impulse motor underneath. The shallow contoured plate is of a size and depth to confine the pieces to be in contact most, but not all, of the time. Its axis of rotation is just slightly tilted with respect to gravity, by tilting the plinth itself. All this provides an ever-changing slope that the sphere and femisphere are moved up onto, and then they roll down. A one-hour rotation involves about four to five movements of each piece. Their movements are random, since the relative position and contact between pieces mutually enhance or hinder each response to the changing slope.

The kinetic wall hangings created by David Roy contain a fine wind-up ▸



David Roy's *Fiesta* is a kinetic wall hanging that moves for hours with a wind-up mechanism. The motion of many others can be seen on David's website, woodthatworks.com.

Mechanisms for movement

Modern electronics and the methods of instruction currently available make learning to add movement, even for the complete novice, no more daunting than learning to use the lathe, applying color or texture, or learning to carve.

Impulse motor *(Photo 1)*

My first development of a movement mechanism, an impulse motor, is described in *Woodturning Design #13,* Spring 2007. The resources are described in the article and are used widely in the hobby industry. Anybody who can read can make one. It is essentially a small geared-down motor that rotates in small steps. The motor can drive levers, provide movement for a Lazy Susan, or move bearings for rotation. The steps can be adjusted in size and interval, resulting in a turntable that can take from several seconds to weeks for a complete revolution. The steps themselves provide momentum impulses. The mechanism is battery-driven, can run for several months, and the complete unit is small enough to be hidden within an artistic piece.

Microcontroller *(Photo 2)*

A second mechanism for producing movement is more sophisticated, stronger, and highly versatile. It uses a microcontroller computer chip that receives input and delivers output. It can be programmed using a laptop. Off-putting as that might sound, one of the two systems that are used widely in the amateur hobby industry is specifically intended for artists. Even so, both mechanisms are so well supported that if you can read, you can make them—it's paint-by-numbers easy.

Two manufacturers of these systems are Parallax and Arduino. The former is what I first used and is illustrated here. The latter is more recent and is open-source designed so there are a variety of clones and lots of technical support. The former is more expensive but better documented, and I have found it easier to use, probably because I started with it. The latter and its clones are significantly less expensive, more varied, and particularly simplified for artists.

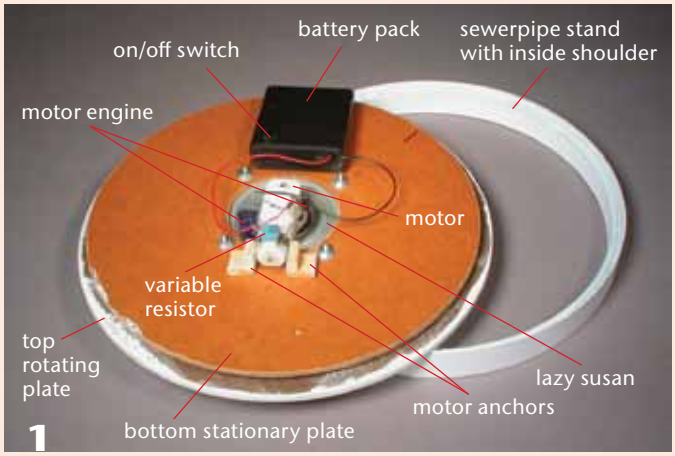
Parallax

1. Parallax (parallax.com) is the maker of its microcontroller and the company's website provides a large selection of products and information. It includes a beginner's kit and a Parallax Forum where you can ask questions of a huge population of experts and hobbyists using the same equipment.
2. On their website, find and click on the Getting Started Guide.
3. Select the BASIC Stamp Discovery Kit. This kit contains everything you need for learning and building a wide variety of movement mechanisms. It has an easy step-by-step instruction manual for the complete novice that contains clear explanations, defines electronics terms in a friendly manner, and most important, builds confidence so you can start creating your own electronics inventions. It is highly instructive about what is possible and teaches things from scratch. All the parts required are supplied, including a servomotor (even several stripped pieces of colored-coded connecting wire) to complete 40 projects.
4. After you get started, you can find parts and supplies from a number of sources on the Internet.

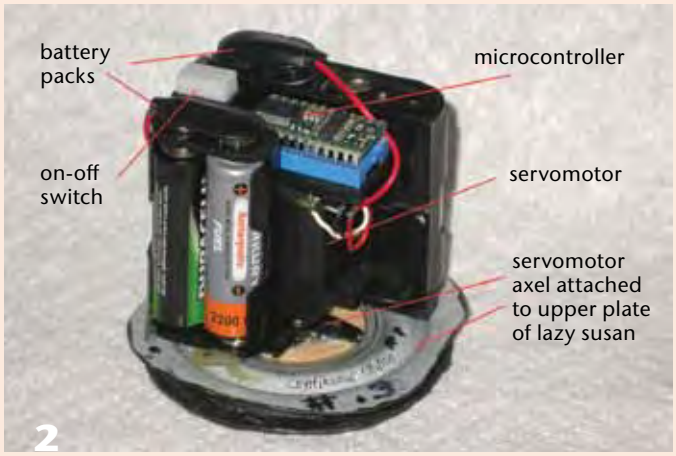
Arduino

Arduino provides a similar comprehensive set of resources (Arduino.cc/en/Main/HomePage).

The website provides all the background, details, and resources and sources for the Arduino system. Seek the Arduino starter deluxe kit V2.0 or the similar Arduino experimentation kit. They can be found at a variety of sources provided by the Arduino homepage. Just like the Parallax kit, these will provide a complete complement of material to learn and construct a variety of kinetic devices.



For details on construction of this impulse motor mechanism, see *Woodturning Design #13,* Spring 2007 or peterrand.ca



A microcontroller-driven servomotor can provide programmed movement for a Lazy Susan or other mechanical systems.

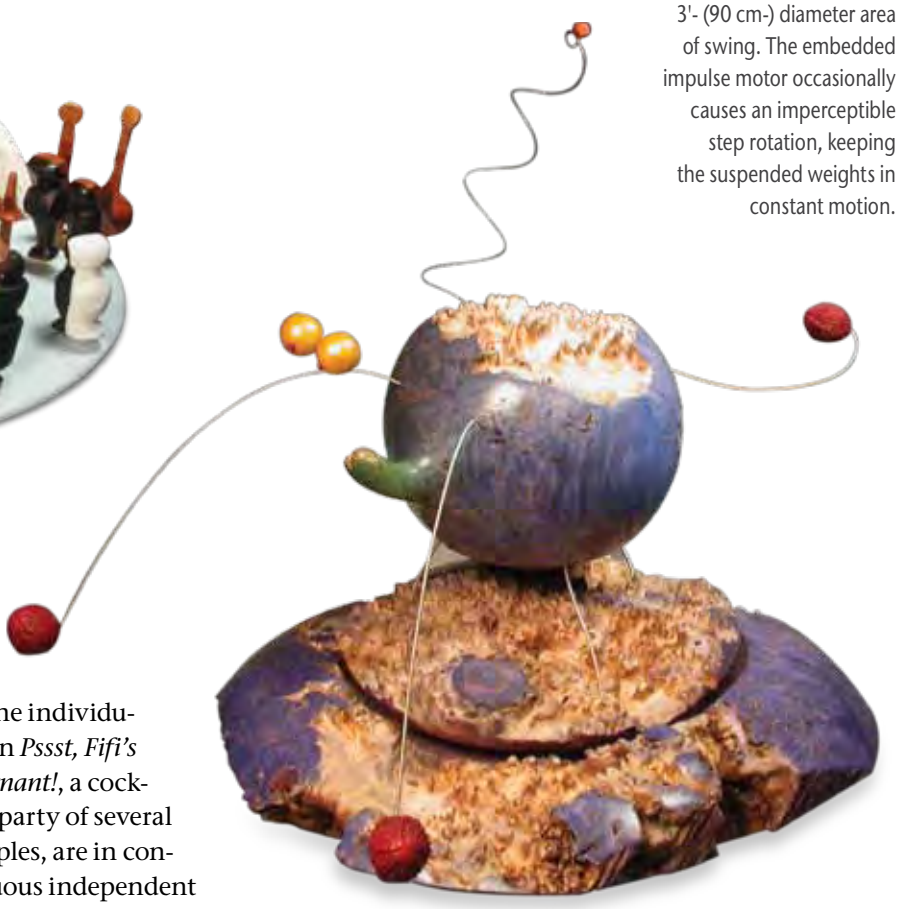
mechanism, so well tuned to the piece that its motion lasts for hours. Motion in these geometric pieces is complex, of variable speed and pattern formation, and intriguing in its sequence, which is infused with rhythm and evolves over time. These qualities would be essential elements in a curriculum on aesthetics for movement.

Movement by mechanical impulse

From the simple observation of the movement of a weight on a wire, I became motivated to explore a number of different kinetic pieces. I examined the possibilities of adding movement to woodturnings by combining a suspended weight with a mechanism to give it a kinetic impulse. I described the first results in *AW*, vol 7 no 3

Peter Rand, *Pssst, Fifi's Pregnant!,* 2007, Various woods, whalebone, steel wire, 5" × 14" (13 cm × 35 cm). Impulse rotations keep the suspended individuals of this cocktail party interacting and chatting.

Peter Rand, *Thingsect,* 2007, Boxelder burl, dye, 3'- (90 cm-) diameter area of swing. The embedded impulse motor occasionally causes an imperceptible step rotation, keeping the suspended weights in constant motion.



(2002). *Thingsects* were the first pieces that took advantage of the graceful movements of a weight swinging on a wire. The appendages are kept in continuous gentle motion, which is produced by an imperceptible rotational impulse every minute or so by the embedded impulse motor. The time required for one full rotation is adjustable from as little as a minute to as long as several hours, eliminating the possible visual tedium of a more rapid, obvious rotation. The hidden mechanism runs on four AA batteries and lasts for well over a year. *Thingsects* are whimsical, and there are endless unexplored possibilities in design, from the minimalist and abstract to the most complex, which includes narrative.

In *Necessary Nurture*, the individuals of this triplet of abstract forms are supported on thin wires. The variations of the weight and the caliper of the wire provide variation of the kinds of movement that result when these are given an impulse. I have chosen a rather subtle gentle motion that one might expect of a loving trio. This is an example where the traditional virtues of form are maintained, that is, the static sculpture might be pleasing enough, but movement among the individuals enhances the aesthetic narrative. *Slow* is a characteristic of movement that attracts me—slow is beautiful.

The individuals in *Pssst, Fifi's Pregnant!*, a cocktail party of several couples, are in continuous independent motion. Each individual is supported on a single fine wire, and an impulse motor drives the entire floor. Individuals occasionally touch and quiet chatter results. The small impulse that causes these quick independent movements is significant. Less significant is the slow and practically invisible movement of the entire crowd as the piece itself fully rotates.

The elements of the deconstructed goblets in *Winds Blow, Wines Flow* are connected by fine wires and allow movement between the fragments. An impulse turntable, mounted under the base, produces a gentle movement among fragments and between the pair of goblets. One can imagine endless variations on this kinetic scheme.

Programmed movement

Femispheres are meant to roll. *Rocking Femisphere* rocks spontaneously, but ▸

Peter Rand, *Necessary Nurture,* 2006, Juniper, steel, 10" (25 cm) high. Step movements keep these individuals interacting.

Peter Rand, *Winds Blow, Wines Flow,* 2004, Shiro plum, steel wire, 9" × 12" (23 cm × 30 cm). Small rotary impulses keep the goblets and their deconstructed components moving.

Michael Brolly, John Biggs, Zac Robbins, Chris Coggiano, Tony Delong, and Lynne Brolly, *Cirque de Cabinet,* 2003, Poplar, mahogany, cherry, plywood, nails, electric motors, electric eye, computer chip, Lazy Susan, beads, buttons, wire, springs, glass, and acrylic paint, 32" × 20" × 20" (80 cm × 50 cm × 50 cm). This interactive sculpture responds to the viewer in complex ways. More of Michael Brolly's work can be seen at michaelbrolly.com.

it doesn't roll. An internal microcontroller and miniature motor randomly, unpredictably, and infrequently shift a weight inside, and suddenly cause this femisphere to rock back and forth then slowly come to rest again until the next movement. The motion is what one expects from this object; however, the timing of the motion is determined by the artist, and is, intriguingly, outside any viewer's prediction.

I designed *Kinetic Triptych*, a multiaxis triplet, to form a group of interacting individuals. Internal microcontrollers cause each individual to rotate, from time to time and in different directions. These pieces taught me some important aspects about kinetics. My first design of their movement was one of complete randomness—rotation occurred at random intervals, in random direction, and of a random amount. My intention that these individuals be in conversation failed; the motion and relationships did not reflect conversation. Reprogramming so each individual faced one of its partners, and at random turned to face another, resulted in more believable conversations. Interestingly, although this resolved my intention for the movement, some viewers preferred the more random movement!

Peter Rand, *Rocking Femisphere,* 2008, Boxelder burl, dye, 9" (23 cm) dia. An embedded servomotor and rotating weight cause this "bowling ball from hell" to rock, unpredictably, from time to time.

Interactive kinetics—elaborate electronic mechanisms

Cirque de Cabinet by Michael Brolly, John Biggs, Zac Robbins, Chris Coggiano, Tony Delong, and Lynne Brolly is an unusual multimedia work that reacts to the viewer's presence. It consists of a Buddha-like figure sitting on a bed of nails. The beaded figure in the belly of the creature dances and its eyes move. The eyelids open and close, sometimes winking. The largest beaded jewelry piece moves in and out and a light above the figure in the belly turns on and off. The legs rotate, exposing a collection of jewelry inside. This interactive piece is wildly rich in narrative and illustrates the level of complexity possible in kinetic woodturning.

Possibilities

Abundant possibilities exist in kinetic woodturning. Technical means for producing movement in artistic pieces are now accessible to any woodturner, making the exploration of kinetics in woodturning feasible. Several methods of using movement can be seen in the examples described. With any one of these, the artistic quality of movement can be explored and developed.

Movement is a powerful attention-getter, so it is important to examine and consider how best it can be used

as an artistic quality. From my experience and personal aesthetic, movement is most compelling when used with subtlety. Two pleasant realms of motion appeal to me: The first is movement that is so slow that change is imperceptible—only a changing perspective of the piece is presented and made apparent. The other is movement slow enough not to enter the category of annoying object or overly playful toy. Movement, as an integral part of the overall aesthetic of a sculpture, can enhance its form, color, and texture. With the advent of embeddable mechanisms, we woodturners have a rare and exciting opportunity to work in a largely unexplored field. ■

Peter Rand, *Kinetic Triptych*, 2008, Maple burl, dye, 18" (45 cm) tallest form. Embedded microcontrollers keep these 'cats' turning to each other in conversation, an example of dynamic profiles and negative spaces.

Peter Rand is a retired research biophysicist and has been woodturning since the 1980s. Only his obsession with the femisphere and its derivatives remains from his classical period. His ongoing interests are in exploring and experimenting with novel art forms involving deconstructions, multiaxis turning, and kinetics. His website is peterrand.ca. Many of his kinetic creations can be seen in action at RPRkinetics on YouTube.

Some landmark developments in kinetics

History leaves kinetics in woodturning as a wide-open field for exploration. Adding real movement to art is a prime artistic urge. Kinetic art, also known as *kineticism*, has had a long and checkered history. With limited success, artists have attempted again and again to incorporate real movement into their art. The technical difficulty of producing movement was always a limiting factor. With a series of rises and crashes over several decades, kineticism has been referred to as the unrequited art.

A number of renowned artists have made fundamental contributions to kineticism. These contributions are useful to think about for any woodturner who is considering kinetic creations. I offer a short list of artists to research.

Marcel Duchamp, 1913–1925, designed rotating mechanical devices, the mounted bicycle wheel, and rotating glass plates. It is significant that he eventually abandoned the mechanical motors required for kinetics, viewing them as "inconsistent with art."

Laszlo Moholy-Nagy and his students, 1930–1940, brought insights about kinetic art to the public's attention. He undertook comprehensive theoretical work on notions of the artistic qualities of motion and of time in sculpture and recognized the artistic novelty of movement and its importance from the point of view of human activity and perception. In addition, he recognized the technical failure to disguise the engine of motion, but encouraged artists to keep trying.

Naum Gabo, from the 1920s, recognized and insisted that implied motion is not an artistic equivalent or substitute for real movement. The human response to seeing an artistic piece change with time is qualitatively different from the illusion. He produced only one kinetic work, always cited as a fundamental kinetic concept: that a rotating/vibrating flexing vertical wire swept out a volume, showing that a moving one-dimensional object can produce a three-dimensional virtual volume.

Gabo recognized and insisted that motion itself is the aesthetic of importance and not the mechanism that produced it—hiding the mechanism was an important task for the future. He recognized even then that electronics and miniaturization might eventually overcome these formidable technical problems.

Alexander Calder, from the 1930s, established an important place for kinetic art through the invention, prominence, and popularity of his mobiles and stabiles. His early use of motors was abandoned as inconsistent with the desired aesthetics. He relied on air currents thereafter.

The 1940s through the 1960s produced a revival and renaissance of kineticism and produced some of the first exhibitions and retrospectives of this newly revived art. Here are a few notable artists.

Jean Tinguely mocked the machine, using the machine and its innards as the art object itself, which often self-destructed. He emphasized the absurd. His work is a parody of kineticism.

Pol Bury produced subtle micromovement within assemblies of abstract pieces, rather than movement of the whole. It is important to note that he hid the mechanism producing the movement within the artistic piece.

George Rickey, known for his outdoor installations of calm wind-blown vertical vanes, was a strong proponent of kinetic art. A book he authored provides one of the few sources describing the development and evolution of kinetic sculpture. Rickey identifies other kinetic artists spurred by a revival of kinetics in the 1960s. This newer generation of artists introduced all kinds of kinetic techniques to all kinds of kinetic art: motors, mechanical contraptions, liquids, lights, sounds, magnets, springs, and hand-activation.

Further Readings

- *Beyond Modern Sculpture: The Effects of Science and Technology on the Sculpture of This Century,* Jack Burnham, 1968, Penguin Press.
- *Constructivism: Origins and Evolution*, Revised ed., George Rickey, 1995, George Braziller.
- "Turning to the Fourth Dimension," Peter Rand, *American Woodturner*, 17(3), 2002.
- "Slow Turntables," Peter Rand, *Woodturning Design* #13, Spring 2007.

Virtual Woodturning

How SketchUp can help you design or refine your work

David Heim

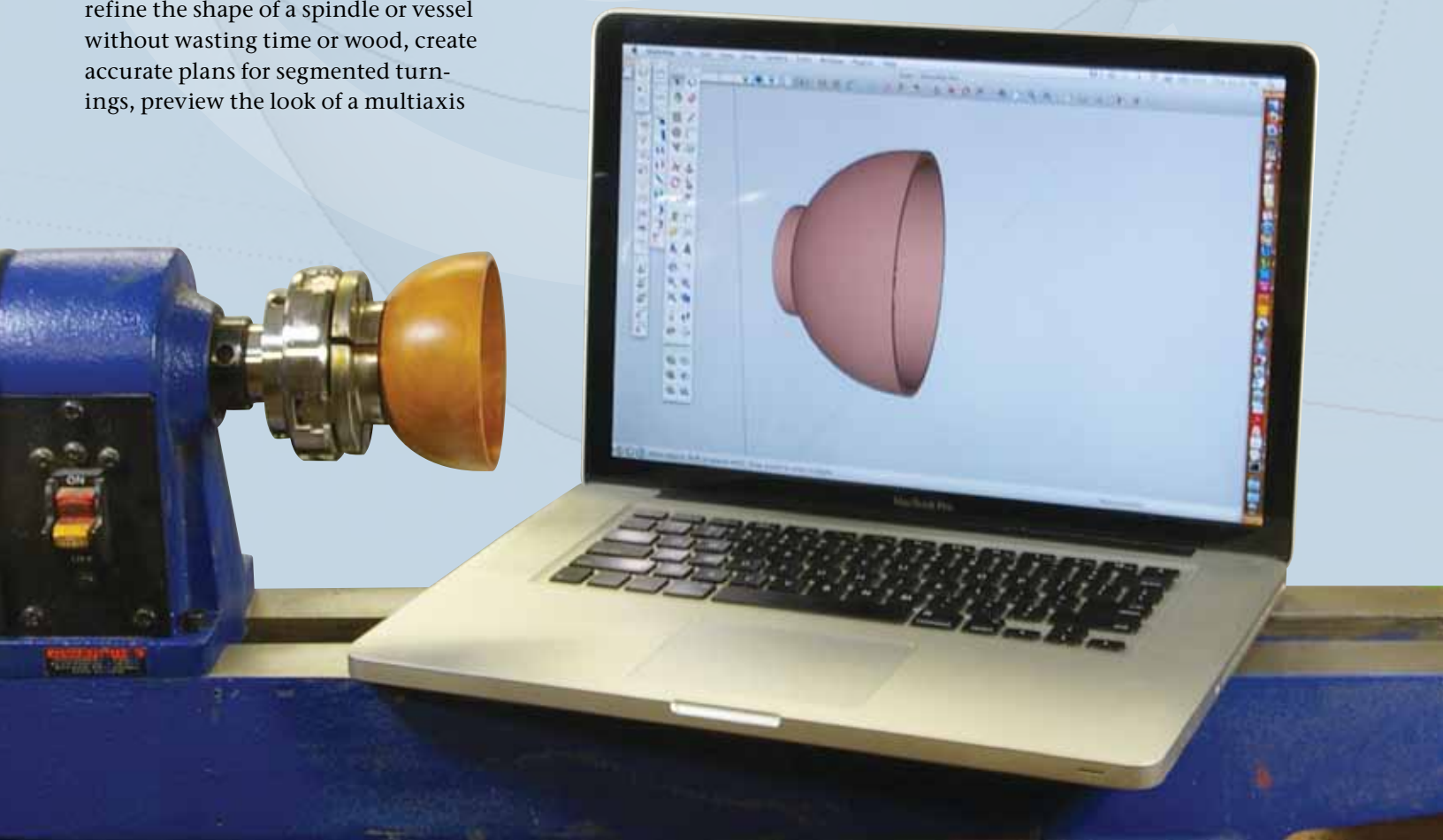
Google SketchUp, a powerful, versatile 3D drawing program, has revolutionized the way many woodworkers go about their business. They use it to create complete, accurate plans for the furniture they make, perfectly detailed and with every part of every joint in exact alignment. SketchUp works for woodturners, too.

SketchUp won't improve your tool control or free you from sanding, but it will let you work faster and with fewer frustrations. You can refine the shape of a spindle or vessel without wasting time or wood, create accurate plans for segmented turnings, preview the look of a multiaxis turning and rotate it to view the piece from any angle, generate a plan with all the dimensions you need, or produce full-size templates for duplicate turnings.

SketchUp basics

SketchUp is one of the simplest, most intuitive applications I have ever used. Its various tools let you draw straight lines, arcs, circles, and polygons, change their proportions and give them thickness, move them around the screen, and join them. The illustrations on page 47 show the main tools and the basic SketchUp screen.

Download the SketchUp application, free, at sketchup.google.com. You can launch SketchUp at breakfast and create workable 3D models by lunchtime. The SketchUp website includes tutorials that will quickly teach you all the basics. There are

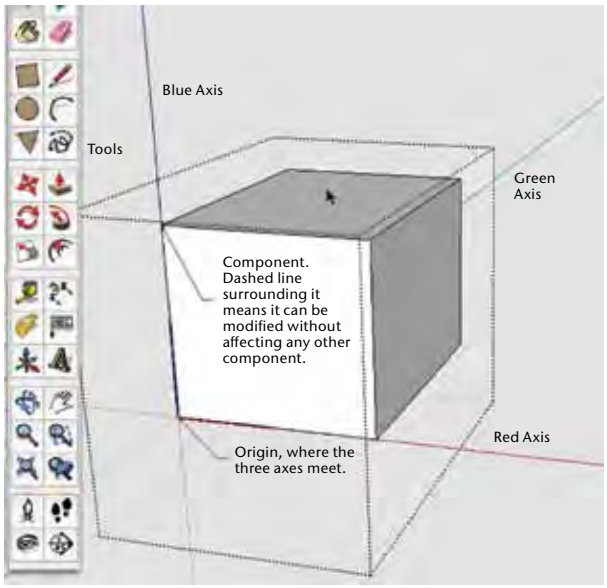


several good books, blogs, and websites to teach you more; the sidebar on page 51 lists my favorites. There's also an ever-growing library of plug-ins: separate apps that deliver extra functions. Many are free. I'll cover two that benefit woodturners.

SketchUp does have some quirks, which can be frustrating. The first is that you always work in 3D. Your drawing generally follows one of three color-coded axes. You must stay on-axis; otherwise you won't create solid shapes. Fortunately, SketchUp has numerous on-screen aids to keep your drawing oriented properly.

The second drawback is that you must convert the shapes you draw into components. A *component* is SketchUp lingo for a discrete object. If you don't save shapes as components, you cannot manipulate them without distorting the entire drawing. Suppose, for example, you want to draw a turned, lidded box. You must make the box and lid as individual components; otherwise, you can't separate them.

I urge you to try SketchUp. You may find it easier than pencil and paper for drawing curves or accurate templates. Better still, it may lead you to try turnings you never thought you could make. Spend some time familiarizing yourself with the tools and basic procedures. Then try your hand at some virtual turning.



Everything drawn in SketchUp must generally follow one of the three axes. The origin, where the axes converge, is a handy center point for turnings.

These are the basic SketchUp tools. The ones used most often are shown in bold.

Easy bowls and spindles

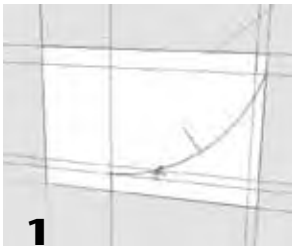
SketchUp's Follow Me tool is a woodturner's best friend. The tool lets you draw a bowl or spindle with a couple of mouse clicks. Here's how:

Work at the origin, where the three axes converge. Draw a rectangle that is the thickness or length of your turning blank and half its width.

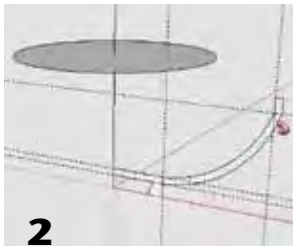
Use the Tape Measure tool to place guidelines to help you draw the profile you want with the Line and Arc tools (*Figure 1*). Use the Eraser tool to eliminate stray lines. When you've finished, the profile should fill with a color, which tells you that all the lines are connected and on the same plane. If that doesn't happen, rotate the drawing so you can view it from the side; if you see any lines poking out to the front or back, redraw them so they are coplanar. Zoom in close to be sure all the lines join. Make the finished profile a component.

Double-click the profile so you can modify it. Beginning where the center of the finished turning will be, draw a line up along the blue axis, past the top of the profile. At the end of that ▸

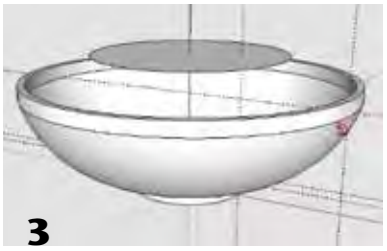
Draw a bowl



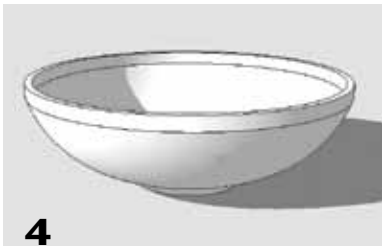
Draw half the profile within a rectangle, using the Line and Arc tools.



Erase unneeded lines. Add a vertical guide and a circle.



Click on the circle with the Follow Me tool, then click the bowl profile.

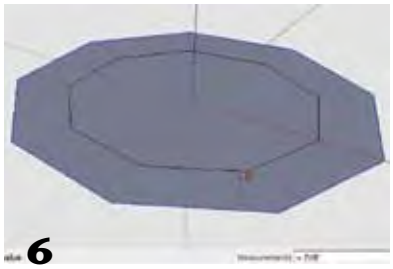


SketchUp generates the bowl shape instantly. Erase the circle and guideline.

Plan simple segments and staves

5

Draw a polygon with the number of segments you want.



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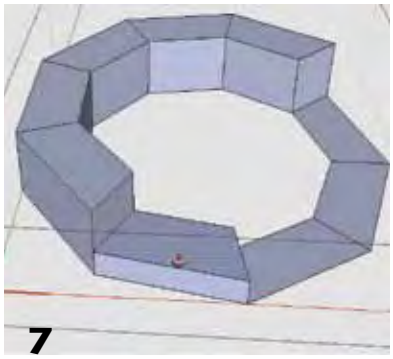
Use the Offset tool to draw a second, smaller polygon. Erase the middle.



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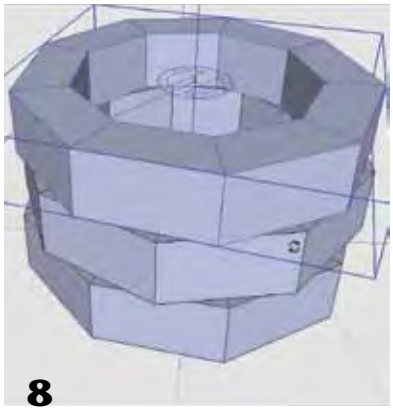
Use the Push/Pull tool to give each segment thickness.



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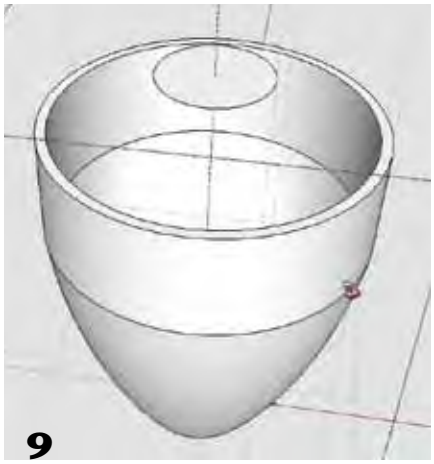
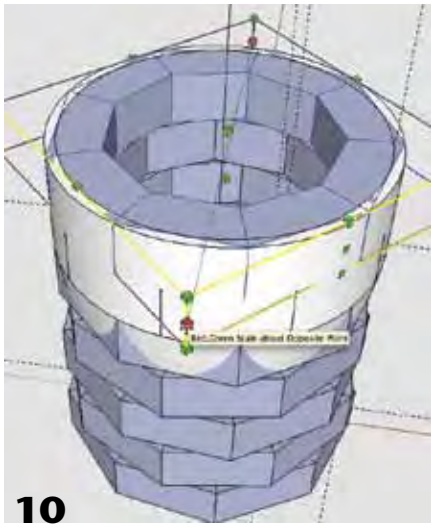
Copy, stack, and rotate rings until you reach the desired height.



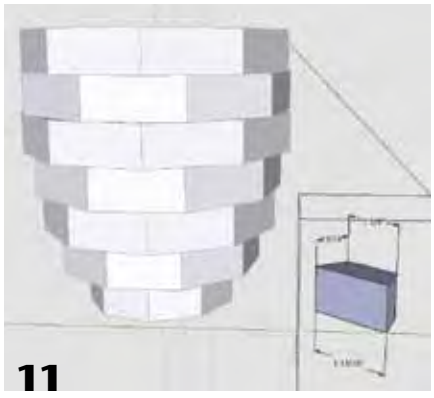
9

Use the Follow Me tool to generate the shape of the segmented vessel you want to turn.



10

Use the Scale tool to resize layers until the segments hide the vessel.



11

Copy one segment of each ring and mark dimensions and angles for cutting.

line, draw a circle. It can be any size, but be sure the cursor turns blue, which signals that the turning will be centered on the blue axis (*Figure 2*).

With the Select tool, click on the circle to highlight it. Then select the Follow Me tool and click once on the profile. It instantly becomes a 3D object (*Figure 3*). To add shading to the model, go to View>Shadows.

Use the Rotate and Pan tools to check your handiwork. If you want to change it, undo the extrusion by pressing control-z (command-z on Macs). Modify the profile and extrude it again. Once you have a shape to your liking, delete the circle and vertical line (*Figure 4*).

By default, a circle in SketchUp consists of 24 sides. If the piece you extrude looks too faceted, give the circle more sides. Click once on the Circle tool and you will see the number of sides listed in the Measurements box at the lower right-hand corner of the screen. Type a larger number (48, say) and press Enter. Redo the extrusion.

Simple segments and staves

The ability to divide a circle into any number of sides makes SketchUp well suited for planning a segmented turning. However, SketchUp isn't the only (or the best) computer application for segmenters. Lloyd Johnson, a woodturner in Oregon, developed a suite of programs before SketchUp came on the scene. Using his 3D Design PRO program, you can draw a profile of a bowl or vessel and instantly see it in three dimensions, then move the profile to Woodturner PRO and plan various types of segments or staves. The software calculates cutting angles and sizes automatically. A third program, Lamination PRO, lets you plan decorative rings or borders, calculating cutting angles and sizes for you. The three programs, for Windows computers, cost $99 from woodturnerpro.com.

A similar program for Windows computers only, Woodturner Studio, is available for $70 from Craft Supplies USA.

If you want to plan a segmented turning on the computer but don't want to purchase software, use SketchUp. Here's how to plan a basic closed-segment vessel:

Click on the Circle tool and type the number of segments you want in the turning; we'll use 9. Press Enter.

With the Circle tool still selected, click at the origin, then move the cursor along the red axis. Type the radius you want (3, for this example), then press Enter. A nine-sided shape will appear. Save it as a component (*Figure 5*).

Choose the Offset tool and click once on any edge of the shape. Hold down the mouse button or trackpad and move the cursor toward the origin. Type the desired width for the staves and press Enter (*Figure 6*).

Use the Line tool to connect corners of the inner and outer shapes. Click in the center of the shape to highlight that area, then press Delete. You have a nine-sided ring.

Select the Push/Pull tool and hover over one section of the ring to highlight it. Click once, then move the cursor up to give the segment the desired thickness (*Figure 7*). Hover the Push/Pull tool over each remaining section and double-click to repeat the change of thickness. Save the ring as a component.

Use the Move/Copy tool to duplicate the ring and move it into position. Hover over the ring; its edges will turn blue. Click once and hold down the Control key (Option on Macs) to copy the ring. Move it up along the blue axis. To avoid moving the copy too much, type the thickness of the ring and press Enter.

Select the Rotate tool and hover it over the copied ring to highlight it. Click once at the center of the ring, then drag the cursor to a corner. Click again and move the cursor left or right to rotate the ring. Continue copying and rotating until you have the number of rings you need (*Figure 8*).

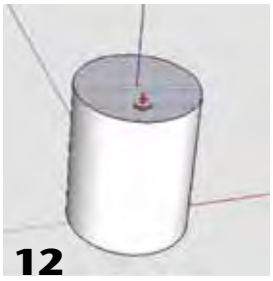
You can combine the stacks of rings with the shape you wish to turn to fine-tune the size of each ring.

Select all the rings and hide them by choosing Hide from the Edit menu at the top of the screen. Use the Follow Me tool to create the vessel you want to turn from the stacked rings. Be sure to put the center of the shape on the origin (*Figure 9*).

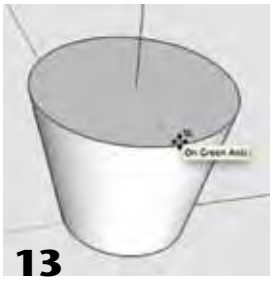
Unhide the rings. You can see immediately if the vessel protrudes past the inner or outer edges of any of the rings.

Use the Scale tool to adjust the diameter of the rings. Click once on a ring and choose Make Unique from the Edit menu. Choose the Scale tool. An array of squares will appear around the ring. Hover over a square in the center of a corner to open a window saying, "Red, Green Scale about Opposite Point." That tells you how the shape will change size. In this case, you'll adjust the horizontal dimensions but not the height. Click on the square (it will turn red) and hold down the Alt key (Option on Macs) as you drag the cursor away from the center of the ring. Stop when you can no longer see the edge of the vessel protruding past the ring. Follow the same procedure to make a ring smaller in diameter. Just move the ▸

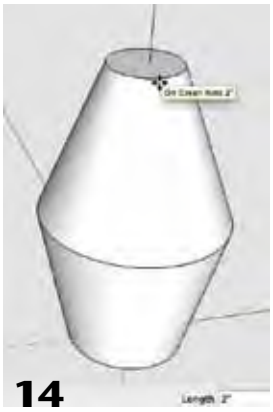
Multiaxis Turning



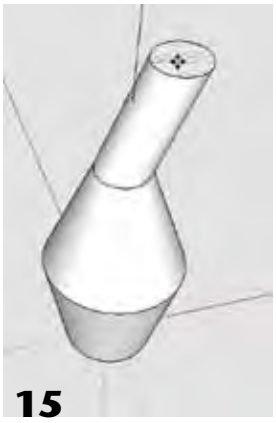
Create a cylinder.



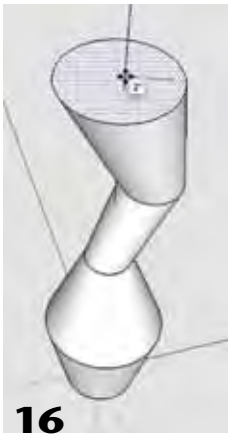
Enlarge the top.



Extend the cylinder and shrink the top.

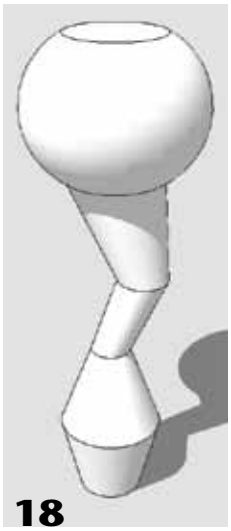


Extend the cylinder again and push it to one side.



Add another tapered cylinder.

Top off with a knob.



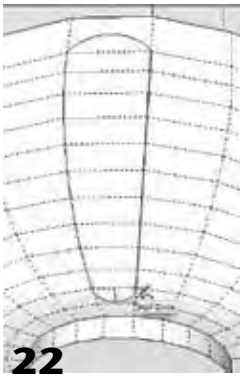
Complete.

Carving

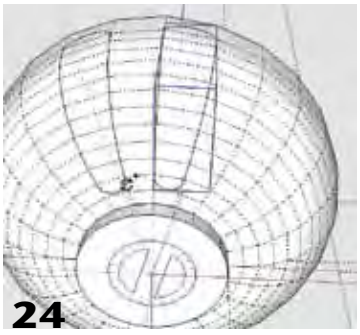

19
Draw a simple bowl shape.


20
Turn on "hidden geometry" lines.

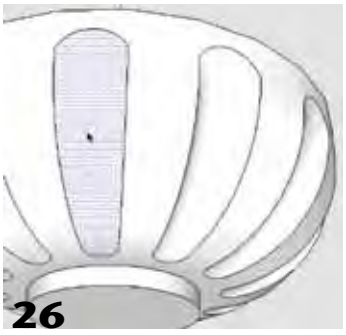

21
Draw two lines up the side.

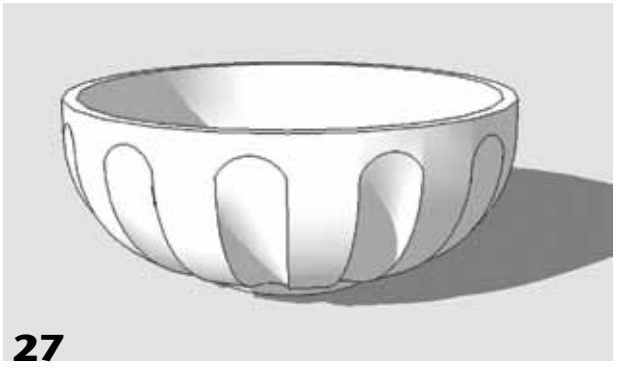

22
Join the lines with arcs.


23
Generate the carved scallop shape.


24
Copy the scallop shape around the bowl.


25
Intersect the scallops and the bowl shape.


26
Delete part of the surface to make the carvings appear.


27
Complete.

cursor toward the center of the ring (*Figure 10*).

When you've finished, copy each ring you resized and move it away from the rest of the model. Delete all but one segment and use the Dimension and Protractor tools to add dimensions and angle information. Print out the sketch and take it to the shop (*Figure 11*).

Note: If the ring segments will be the ends of staves, you can skip all the copying, rotating, and resizing. Use the Dimension and Protractor tools to size one segment of the ring.

Multiaxis turning

The Follow Me tool won't extrude a multiaxis turning. However, you can generate one a segment at a time.

Begin with a circle, centered at the origin. Use the Push/Pull tool to transform the circle into a cylinder (*Figure 12*).

Select the Move/Copy tool and hover over the top edge of the cylinder, trying to align with the red or green axis. You're aiming for what SketchUp terms "cardinal points," spots along the edge that align with the axes. When you hit the right spot, click on the edge of the cylinder and drag away from the origin along the green axis. This creates a tapered cylinder (*Figure 13*). Stop when you've enlarged the top of the cylinder enough. Watch the Measurements box or simply type a value and press Enter.

Use the Push/Pull tool to extend the cylinder along the blue axis. Then use the Move/Copy tool again to push the top edge toward the origin (*Figure 14*).

Extend the cylinder along the blue axis again. Select the Move/Copy tool and hover near the center of the top face of the cylinder. Hold down the Control key (Command on Macs) as

you move the cursor in the direction of the red axis (*Figure 15*).

Add another segment. Extend the cylinder, push it along the red axis, and taper it (*Figure 16*).

Finally, add a knob at the end. Highlight the top edge of the cylinder; open the Edit menu and choose Circle > Point at Center. This puts small crosshairs at the center of the face. From that point, draw a line along the blue axis, then add lines to make a rectangle. Draw the knob shape, then erase the extra lines. Draw a circle to make a path for the Follow Me tool, and extrude the knob shape (*Figures 17, 18*).

Plug-in carving

You can "carve" a curved surface in SketchUp with the help of two plug-ins. Adding shallow coves to a bowl shows how it is accomplished.

Install the Weld and Extrude Tools, which are free plug-ins. For Weld, go to smustard.com/script/Weld. For Extrude Tools, go to forums.sketchucation.com/viewtopic.php?p=217663#p217663.

Draw a simple bowl with a small, plain foot. Use the default (24-side) setting for the Circle tool. The sides of the bowl should be straight about 1" down from the rim (*Figure 19*). Make the bowl a component but do not open it for editing. In the View menu, click on Hidden Geometry. This produces dashed lines all over the surface of the bowl (*Figure 20*).

Draw lines from the bottom to the top of the bowl, following a pair of dashed lines (*Figure 21*). Hold the Shift key as you click on the segments of one line to highlight all of them. In the Plug-Ins menu, choose Weld. Answer "no" to the two prompts that appear on screen. Repeat for the other line.

Use the Arc tool to connect the ends of the welded lines (*Figure 22*). Hide the bowl component and turn off hidden geometry.

To create the carved scallop, go to the Plug-Ins menu and choose Extrusion Tools > Extrude Edges by Rails. Click on the arc near the rim, then click on each welded line. Finally, click on the arc near the foot of the bowl. Extrude Edges generates a concave shape and asks you various questions about it; answer "no" to most but "yes" to "Smooth Edges." Once the final shape appears, select it, go to the Edit menu, and choose Group > Make Component (*Figure 23*).

Unhide the bowl component. Rotate the drawing so you can see the bottom of the bowl. Turn on hidden geometry and select the scallop component. Choose the Rotate tool and click at the origin (the center of the bowl's foot). Hold down the Option key and move the cursor until it reaches a corner of the scallop component. Begin moving the scallop and type 30 to set the number of degrees for the rotation. This will place a copy of the scallop between another pair of dashed lines. Repeat until you come full circle (*Figure 24*).

Select everything in the drawing. From the Edit menu, choose Explode, then Intersect Edges with Model (*Figure 25*). Turn off the hidden geometry. You should see the outline of the scallop shapes on the edge of the bowl. Hold down the Shift key as you click once in each scallop (*Figure 26*). Press Delete to complete the bowl (*Figure 27*).

These four examples are hardly the only ways to create turnings in SketchUp. You can use it for open-segment turnings, inside-out turnings, turned and sculpted pieces, and much more. Once you begin to use SketchUp, I'll wager that you will soon wonder why you never tried it sooner. ■

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Where to find more information

The help section of the SketchUp website (sketchup.google.com/support) includes well-done self-guided tutorials and explanations of how to use all the program's tools.

If you want to look further afield, try these books and websites:

"The SketchUp Guide for Woodworkers," $12.99, by Tim Killen (Taunton Press e-book). Buy this download-only book at store.finewoodworking.com/sketchup-guide-for-woodworkers-tim-killen-ebook-077846.html. It covers basic SketchUp technique plus some advanced procedures for serious woodworkers.

"Woodworker's Guide to SketchUp," $39.95, by Bob Lang, one of the editors of *Popular Woodworking* magazine. You can buy it at craftsmanplans.com/sketchup.htm.

"Design.Click.Build" at FineWoodworking.Com (finewoodworking.com/blog/design-click-build), is a blog maintained by Tim Killen and Dave Richards, both SketchUp masters.

"SketchUcation," at forums.sketchucation.com, is the online forum for SketchUp users. It includes an area for tutorials and an index of free plug-ins.

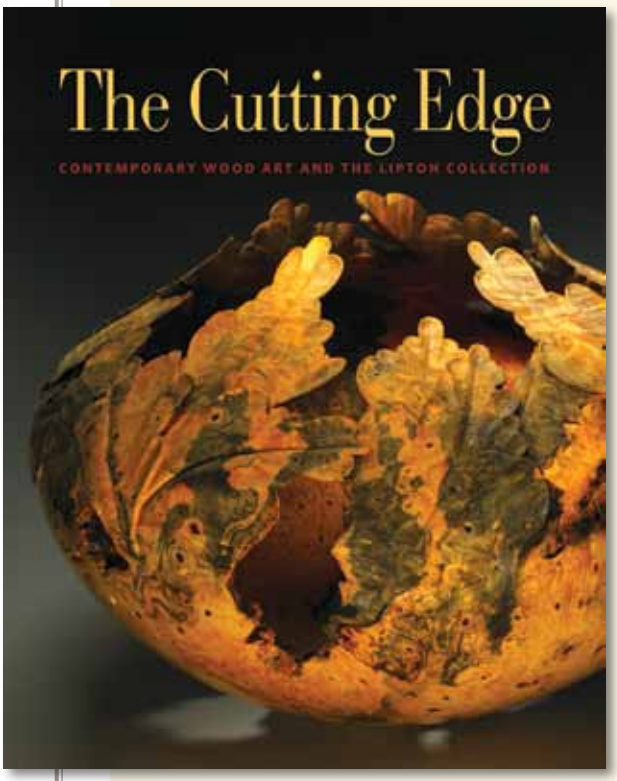
"Turned.Out.Right Woodturning," at turnedoutright.com, is a website maintained by woodturner Don Kleinschnitz. He includes a blog, gallery photos, plans, and the like. You can also buy his e-book, "Woodturning With SketchUp," on the site, for $10.99. The text comes with a SketchUp file preloaded with a "virtual lathe" and a quad-ruled grid intended to make it easier to draw profiles. Although a bit gimmicky for my taste, the book does have some useful features, including a library of pre-drawn shapes that users can modify. If you don't like working with the virtual lathe or quad-ruled grid, you can turn them off.

The Segmented Woodturners online-only virtual chapter of the AAW, at segmentedwoodturners.org, features a forum, a gallery of members' work, and links to other sites.

The Ultimate Cache of Woodturned Art

Reflections on the Lipton Collection

David M. Fry



On the cover, **Ron Fleming,** *Metamorphosis,* detail, 1989, Buckeye burl, 14½" × 20½" (37 cm × 52 cm)

Minneapolis Institute of Arts

Imagine that you are a person of comfortable, but not unlimited, means who has just acquired another work of a favorite artist. In fact, you already own more than 150 of his pieces and may be hard pressed to find a place to display the new purchase. It will have to compete for space with the output of more than a hundred other makers, many of whom you have also collected in depth. Your home and office have long passed the saturation point for art and fine craft, and the condominium that you've outfitted as a personal museum with display cases and pedestals is overflowing. Vessels and sculpture populate countertops, oven racks, and even the bathtub. Fortunately, visitors can still navigate the narrow aisles through the condo collection because at any given time, some of the accumulated 2,000+ works are on loan to various institutions across the country.

If you do not already recognize it, enter the singular world of Dr. Irving Lipton, California pediatrician and collector extraordinaire who, until his death in 2001, played a defining role in launching and sustaining studio woodturning as we know it today. Unfamiliar to many in the field, he nevertheless "discovered," befriended, and bankrolled many of the second-wave turners who ventured beyond the familiar tributes to wood grain and symmetry enshrined by Bob Stocksdale, Ed Moulthrop, and Rude Osolnik. He also attracted the attention of curators at well-known museums, as well as Edward Jacobson and other collectors who went on to produce their own glossy catalogs. What is surprising is that such a seminal behind-the-scenes figure is only now emerging into broad public view through recent publication of *The Cutting Edge: Contemporary Wood Art and the Lipton Collection*.

Two-page spread,
Michael Peterson,
Traveler 1, 1990, Bleached madrone burl, 5" × 11" × 9½" (13 cm × 28 cm × 24 cm)

The Contemporary Museum, Honolulu

Escaping the coffee table

During Dr. Lipton's final years, Kevin Wallace often pondered how the story of expressive woodturning might be rewritten to help validate this work as legitimate art. As former manager of del Mano, perhaps the world's preeminent gallery of fine woodturning, he personally knew many of the artists represented in the Lipton collection. Few if any other people were as well positioned and equipped as he to pursue such a publication project. To some extent, though, he believed that the emerging art books on the Wornick, Mason, and Bohlen collections were already establishing a new field. He still wondered whether the standard catalog format of scholarly essays and consecutive color plates really engaged a wide audience. Perhaps a more integrated, less predictable approach with an underlying storyline would be more likely to keep books off coffee tables and in the laps of readers.

After Dr. Lipton's death, Kevin embarked on a path to publishing a new species of art catalog that would trace the evolution of an entire studio movement through its largest collection of work. As an active participant in accession negotiations between the Lipton family and several museums, he knew he could tap institutional resources such as staff photographers and curators for contributions to the publication. Unfortunately, the negotiations did not progress as quickly as he had hoped, and by the time all the parties had endorsed the gift transfer and book agreements, years had passed, as had several artists who appear in the catalog.

In 2011, the long-deferred publication came off the presses. One look at the Table of Contents shows just how far the book departs from the usual catalog format and range of topics. For some two hundred pages, Kevin meanders with the artists through more than two-dozen chapters, reliving the times, enthusiasms, and struggles of woodworkers swimming against the current. The sweep of his story takes in personal and occupational backgrounds, back-to-the-land adventures, and even the impact of music. Although Kevin's tour of the field has a freewheeling spirit, the writing remains tight and perceptive. No longer buried in introductory essays, ▸

Brenda Behrens,
Tender Tendrils II, 1996, Myrtle, 3½" × 7" (9 cm × 18 cm)

Yale University Art Gallery

Giles Gilson, *Incident at the Crossroads,* 1997, Various woods, metal, Corian, acrylic paint, 18¾" × 5" (48 cm × 13 cm)

Minneapolis Institute of Arts

Frank E. Cummings III, *Cabinet With Vessel,* 1988, Maple, ivory, walnut, sterling silver, onyx, 22¼" × 8⅛" (57 cm × 21 cm)

choice lines from makers, curators, and editors pop up in the running narrative, photo captions, and display quotes. In short, the innovative format succeeds on almost every level. Admittedly, the thematic approach does sacrifice the ready access to individual artists provided by alphabetized surveys, but a serviceable index minimizes the inconvenience.

Museum-quality photography further enlivens the reading. Imaginative pairings, generous picture size, and tailored backdrops all contribute to a strong visual impact. Book designer Ron Shore deserves high praise for pulling everything together seamlessly and setting it in motion. Nothing demonstrates this more than the catalog cover itself, where Ron Fleming's sharply scalloped leaf pot provides the perfect pedestal for the book title and a provocative invitation to plunge inside.

Defining the collection

The original Lipton collection no longer resides at one site. Much of its core is now divided among five institutions profiled in the catalog: the Long Beach Museum of Art, Los Angeles County Museum of Art, Minneapolis Institute of Arts, Contemporary Museum (Honolulu), and Yale University Art Gallery (New Haven). The Beatrice Wood Center (Ojai, CA), which Kevin has directed since 2005, also retains a number of works, as does the Lipton family. Because museum staff had handpicked and photographed the pieces now shown in *The Cutting Edge*, curators had already largely determined what catalog readers would see from the Lipton estate. As a consequence, many makers in the original collection still remain unrepresented in the book's visual record.

Of the eighty-two artists with pieces in the catalog, several stand out for number of works displayed. Frank E. Cummings III easily leads the field, while Michael Brolly, Ron Fleming, Giles Gilson, William Hunter, and Nikolai Ossipov also appear frequently in the photo credits. Equally revealing is the range of noteworthy woodturners who are mentioned in the text but not explicitly linked to the collection. These include Bruce Mitchell, Rude Osolnik, Michelle Holzapfel, Del Stubbs, Mel and Mark Lindquist, and Ed Moulthrop. Such conspicuous voids suggest that Dr. Lipton did not acquire pieces in a systematic across-the-board fashion and that far smaller collections may contain a more inclusive selection of leading woodturning artists.

Collecting in action

Dr. Lipton hovers as a forceful but benevolent presence throughout the book. As Mark Sfirri recalls, "'When I made my [multiaxis] candlesticks, he bought several and wanted more, but he wanted me to paint them. This encouragement was useful in moving my creativity along. Selling work can be motivational enough, but in Irv there was prodding that produced new work that I might not have done otherwise. When the Los Angeles County Museum of Art was interested

in a Walking Table of mine for their permanent collection, Irv commissioned it with the sole purpose of donating it to them. This act was an example of his interest, not only to build his collection but to help the artists and to help museums.'"

Few have reflected as much on the notable collector as Frank Cummings, who has posted several videos on YouTube to share lively, sometimes humorous anecdotes about their relationship. In the catalog, he observes, "'The growth and direction of Irv's collection were based on advice and recommendations from the individuals in the collection. It was not that he would act on every suggestion; as it was, Irv learned and honed his awareness and developed his own personal aesthetics. We traveled across the country to attend conferences, exhibitions, and shows where artists from various disciplines would set up their booths and sell their wares. This offered opportunities to see a great deal of work in one place.'" This dynamic interaction between artist and collector also permeates the stories of Brenda Behrens, William Hunter, and Michael Brolly.

Merryll Saylan, *The Breakfast Tray,* 1997, Maple, 3" × 23¼" × 17" (8 cm × 59 cm × 43 cm)

Los Angeles County Museum of Art

Melinda Fawver, *And There Was One,* 1991, Boxelder, 2½" × 5³⁄₁₆" × 5¾" (6 cm × 13 cm × 14 cm)

Minneapolis Institute of Arts

There can be little doubt that these accounts reflect genuine bonds of respect and affection between the supported artists and the benefactor dubbed Saint Irv. *The Cutting Edge* also offers subtle takes on its colorful subject that paint a more complicated picture of the man and collecting enterprise. For example, the book mentions Dr. Lipton's concern for value, and it is known in the woodturning community that he was capable of hard bargaining. Negotiations of another sort—to dispose of rather than to acquire—followed his death as family members, museums, and others sorted through the estate. It was not an easy process.

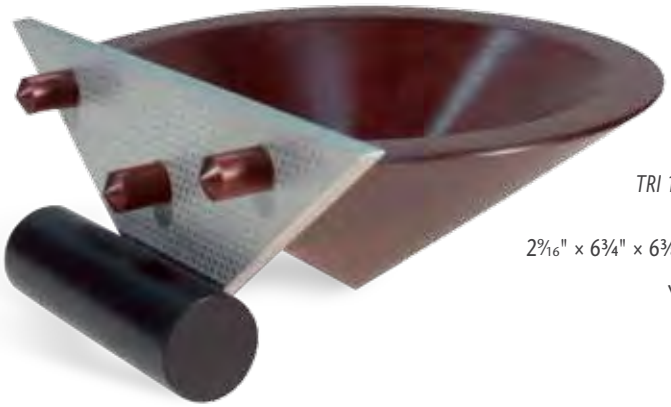
Reaching out and taking stock

In many respects, Kevin's history of artistic woodturning goes far beyond personal and academic influences on makers to consider the impact of broad social upheaval during the Vietnam War and flowering of the counterculture. Some embraced alternative lifestyles and the craft show circuit, while others developed creative skills during or after employment in social services, surgery, or the military. For those who came of age and made hard career choices in the 1960s and 1970s, this book will have powerful resonance.

The catalog also goes out of its way to spotlight the involvement of women, non-Anglo-American traditions, and international artists. During the 1980s, for example, Merryll Saylan, Virginia Dotson, Betty Scarpino, Michelle Holzapfel, and others began to make their presence felt, and they continue to find recognition in national collections. African, Native American, and aboriginal influences also come into focus in the displayed works of Frank Cummings, Euclid Moore, and Peter Kovacsy. As Kevin keenly observes, "The distinctions that have historically separated people are vanishing as we see ourselves as part of something much larger. Whether we are looking at works created by tribal people, or contemporary artists, we are not looking at them. We are looking at us." In the end, unfortunately, the universal vision remains unfulfilled in the catalog index and photo credits. Women and minorities still make up only a small ▸

Stephen Mines, *Magic Wand,* 1995, Eastern hard rock maple, Austrian crystal, 28" × 1½" (71 cm × 4 cm)

Los Angeles County Museum of Art



Michael Chinn, *TRI 12,000,* 1989, Purpleheart, Indian ebony, aluminum, 2 9⁄16" × 6¾" × 6⅜" (6 cm × 17 cm × 16 cm)

Yale University Art Gallery

fraction of the featured artists. Equally significant, three-quarters of those with work in *The Cutting Edge* are now 60 or older, and just a handful are under 50.

It has been said that artistic woodturning is still in its adolescence, a time of rebellion and self-searching. Much evidence supports this observation. What remains to be seen is the emergence of a mature field that can adapt to the changing demographics of the twenty-first century. This ranks as a true survival issue for both makers and collectors.

Defining the art and edge

This remarkable catalog—part oral history, part image gallery, part personal essay—rolls forward on tracks laid down on its front cover: *The Cutting Edge—Contemporary Wood Art and the Lipton Collection*. The intended destination is the validation of Wood Art. The book readily acknowledges huge obstacles along the way: "In many ways, however, crafts remain to this day separated from the arts . . . In the wood field, as in other craft media, there are numerous support systems [museums, galleries, magazines, and guilds], which also serve to inadvertently segregate the work from the larger art world." Despite such impediments, the author believes that wood art remains a viable, recognizable field within the larger realm of art and that this catalog of works represents its cutting edge.

Although Kevin marshals an impressive selection of images and curatorial praise to make his case, many readers may remain skeptical that the new genre of wood art will soon establish its credibility at large. Within its own orbit, the concept of wood art does seem to function usefully as a term of convenience for the work of current and former woodturners, along with a few others. In the larger context of fine arts and public awareness, the term remains unfamiliar or nebulous. The emerging field has yet to clarify its relationship to large abstract and figurative sculpture, art furniture, installations, marquetry, bas-relief, folk carvings, and countless other traditions using wood. In addition, wood art often incorporates additional materials, sometimes to the point that the wood functions largely as an armature for another medium. Consider the metal, Corian, wood, and dominant acrylics in Giles Gilson's *Incident at the Crossroads*. "Acrylic sculpture," "mixed media," or simply "art" might serve as a more apt description of the work.

The Lipton catalog's main title also proves to be thought provoking. Few would dispute that the featured works of William Hunter, Merryll Saylan, David Ellsworth, and their peers represented the leading edge in artistic woodturning when Dr. Lipton collected them. These makers may still occupy the vanguard, but it is impossible to judge without having their recent work and others' on view. As the context is expanded to include all art exploiting wood, the cutting-edge claim appears increasingly tenuous because so many studio artists, art school students, and college faculty are doing it well. Meanwhile, the truly high-end-art community still tends to focus on the latest from celebrities like Wendell Castle and Martin Puryear, whose prices sometimes soar well into the six figures. (*Thylacine*, one of Puryear's smaller works in wood, sold at Christie's for $713,000 in 2007.)

Sorting art from craft

The semantic ambiguities associated with wood art are rooted in the age-old boundary dispute between art and craft. Although this argument has grown stale and tiresome for many, *The Cutting Edge* does not shrink from the issues at stake. Instead, it highlights the rise of the expressive wood vessel as an independent development outside the tradition of pure wood sculpture.

In grappling with the mixed identity of artistic woodturning, the catalog reprises a penetrating insight of pioneering woodworker Art Carpenter: "'The difficulty is that contemporary ART does not have to be beautiful, but craft does, and always has . . . Craft must be done with skill, care, and love. As a matter of fact, Craft stands as a metaphor for these qualities. ART, today, needs none of these virtues in its process, except perhaps the skill of concept. To meld the two—craft and ART—is in many ways an oxymoron.'"

The brilliance of artistic woodturning is that it holds the two traditions together in creative tension. Craft draws attention to its own technical excellence, and art points beyond itself to something that changes the viewer's perception of reality. Few works can do both. It doesn't matter; the world is enriched either way.

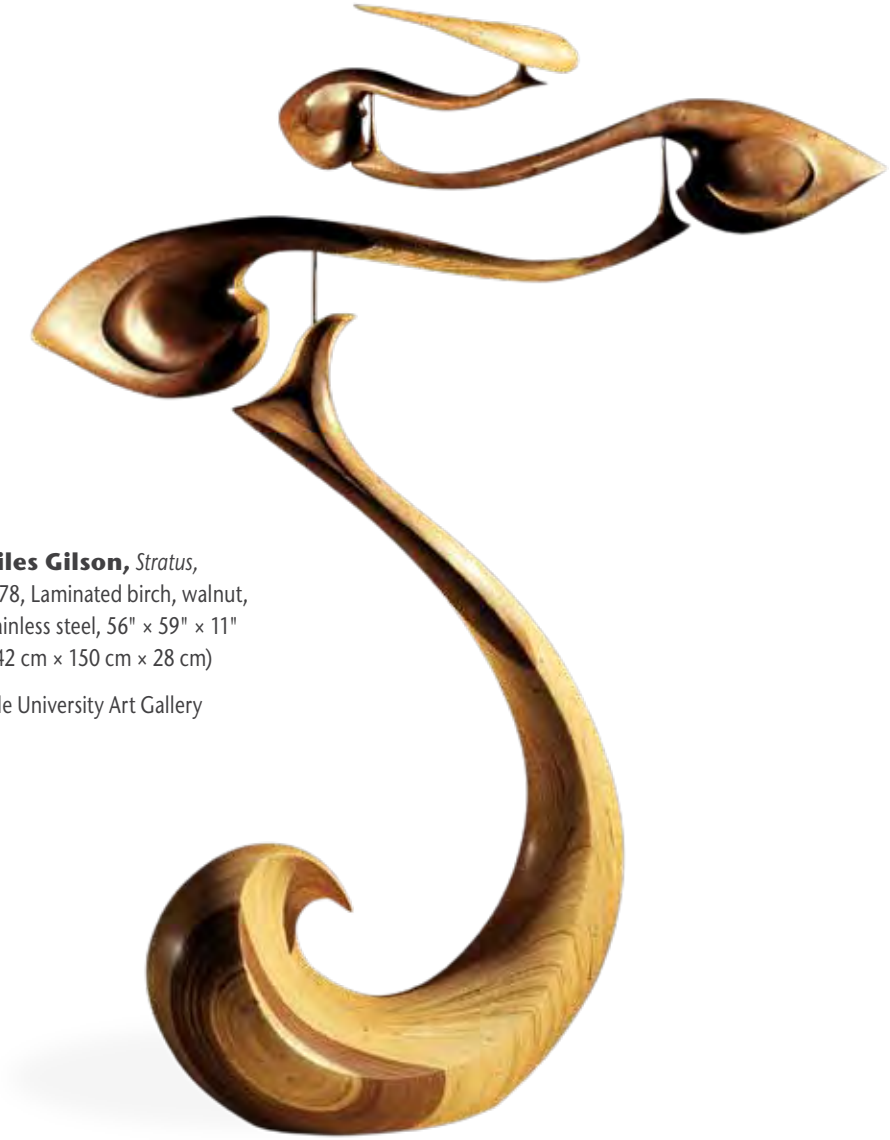
Honoring the source

It is no accident that Kevin's spirited story of the field begins and ends with trees. They produced not only the raw materials for tool-making and symbolic expression among early humans, but also nourishment, shelter, and breathable air for all creatures of the land. Surely peoples of the jungle, savannah, and great temperate and northern forests felt a visceral bond to these ancient ones. Over time the Tree of Life found its way into religions great and small and, in another sense, now serves as a framework for evolutionary biology. Yet the ancient forests have dwindled with the spread of civilization, agriculture, and clear-cutting, and more than the livelihood of woodworkers hangs in the balance.

The material legacy of trees has so much character that it resembles a winsome, long-lost relative full of stories and one-liners. All wood has had a life and lets you know it. No other widely used medium arrives at the studio door with its own resume. As with people, the most distressed histories often make the most arresting specimens. In woodworking, however, there has always been an impulse to use wood rather than just admire or revere it. It thus serves the daily needs of societies and expresses their ideas and feelings.

Out of all this, the maker has a choice: Put natural history on display or take something pliable and impose a function, concept, or intuition upon it. Both paths are equally valid, and sometimes they intersect. Both find ample representation in *The Cutting Edge* and hint at a vast territory yet uncharted.

The Cutting Edge is available from Fine Arts Press (fineartspress.com). AAW and CWA members receive a 15% discount. ■



Giles Gilson, *Stratus,* 1978, Laminated birch, walnut, stainless steel, 56" × 59" × 11" (142 cm × 150 cm × 28 cm)

Yale University Art Gallery

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

Members' Gallery

Cigar Illusions

Martin Osborn

My inspiration for the Cigar Illusion pens came from nature. I had purchased some Cuban mahogany and cut it into small blanks for use in pen turning. The ends of the mahogany still contained sapwood. I remember thinking, "Those look like cigars." I had never seen a cigar-replica pen, so that day I visited a cigar shop to get ideas for size, length, and diameter. I chose several cigars, some based on size and length, others for their attractive embossed bands, which I would use on my pens.

For the first two Cigar Illusion pens, the sapwood acted as the ash of the cigar. I burned the ends with a match and sealed the charred wood for effect. It took a few attempts, adapting kit parts to recess into the wood, to come up with a first success. I submitted that pen (*Cigar Illusion #1*) to the Pen Makers Guild for consideration and was granted membership.

As I further studied cigars, I started simulating the ash using buckeye burl. I used various tools to score, mark, and darken the wood to look like cigar ash. The illusion of ash is still a work in progress and changes slightly with each pen.

Cigar Illusion Series

(Left to right) Cigar Illusion #1, 2010, Cuban mahogany, Upper Cut band, gold titanium Rollerball; *Cigar Illusion #10; Cigar Illusion #11; Cigar Illusion #12; Cigar Illusion #14;* 2011, Hawaiian koa, buckeye, Virtue Man O' War band, silver titanium Rollerball, *Cigar Illusion #15*

(Top) Cigar Illusions #10, 2011, Hawaiian koa, buckeye, La Herencia Cubana band, Bock 250 medium gold nib fountain pen, 5¾" × ⅝" dia.

(Middle) Cigar Illusion #11

(Bottom) Cigar Illusion #12, 2011, Hawaiian koa, Buckeye, Aurora band, silver titanium Rollerball, 5¼" × 11⁄16" dia. (133 mm × 14 mm)

Cigar Illusion #11, 2011, Hawaiian koa, buckeye, Arturo Fuente band, Bock 250 medium gold nib fountain pen, 5¾" × ⅝" dia. (146 mm × 16 mm)

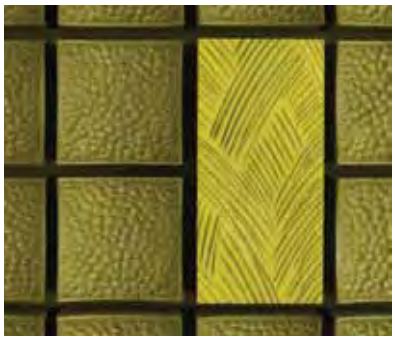
Cigar Illusion #9, 2010, Hawaiian koa, buckeye, Perfecto Garcia band, gold titanium Rollerball, 5⅜" × ⅝"

David Ellsworth collection

Cigar Illusion #15, 2011, Hawaiian koa, buckeye, 5 Vegas A band, titanium Rollerball, 5⅜" × ⅝" dia.

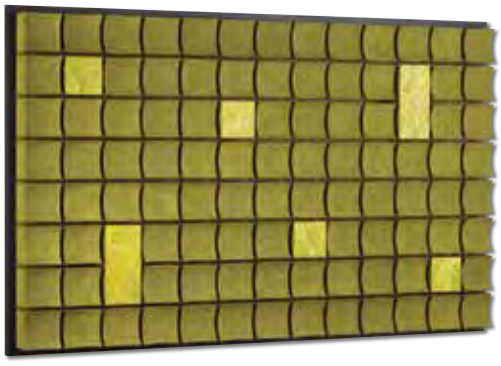
Darrell Copeland

And of the Four is an interactive sculpture that allows four organic forms to interplay. Changing the directional orientation of the vessels can create several scenarios. Positioning three elements in a tight, closed circle, leaning into each other, suggests a like-minded group. Off to the side, a vessel tilted away from the group speaks of peer pressure or better yet, of independence, a breaking away and embarking on a new path, containing a spirit of optimism.



Spring, 2011, Wood, acrylic, 24" × 34½" × 3½" (61 cm × 88 cm × 9 cm)

And of the Four, 2010, Maple, mahogany, milk paint, acrylic, earth magnets, 6½" × 17" × 11" (17 cm × 43 cm × 28 cm)



Members' Gallery

Embellished Vessel

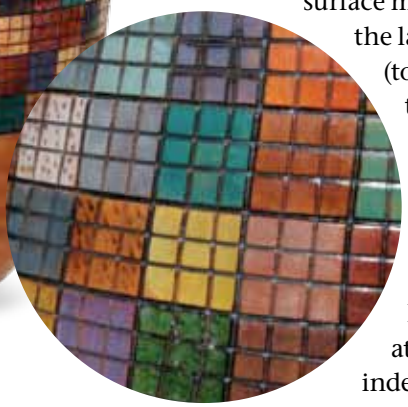
Gary Ritchie

Ideas form as different pieces float around over weeks, months, or even years, then seem to come together as if the process occurred in an instant. After completing my first embellished vessel, I realized that I had been putting together this idea for more than a year, and it may even have begun several years earlier when my daughter acquired an art print of a geometric abstraction, the original work done in stained glass. I printed a copy of the print and filed it in my ideas folder. Also in that folder are pictures of Pam Reily's mosaic work on her turned vessels, which I very much admire. The third component was a failed attempt some time ago to incorporate stained glass into a small bowl.

Untitled, 2011, Cherry, dye, India ink, 15" × 6" (38 cm × 15 cm)

Seemingly out of nowhere, the thought occurred to me, *Why not put an artistic grid on a wood vessel?* One of my goals was to emphasize the artistic integrity of the piece by allowing the "hand of the artist" to vary from strictly structured lines. With this in mind, I recalled various techniques I had seen demonstrated at my woodturners' club: texturing, coloring, and pyrography. I had become familiar with indexing by doing a demonstration on some simple ornamental turning.

After shaping and hollowing a form, I used the lathe's indexing system to determine the size of the squares. (An indexing wheel can be purchased or made if your lathe is not equipped with one.) A flat work surface mounted onto the lathe's banjo (toolrest) allows the vertical lines to be easily marked using a pencil or marking tool—simply lock the spindle at the desired index intervals.



The first challenge came in trying to mark the horizontal lines that completed the squares on larger vessels that ran slightly out-of-round. The solution was to use a mortise-marking tool with the lathe running at a relatively low speed, allowing the tool to move in and out with the shape of the wood. This tool also worked well for sizing the squares as the diameter of the vessel changed, eliminating the need for taking and transferring individual measurements.

I burned the horizontal lines for the squares by holding a wire against the spinning vessel. For the vertical lines of the squares I hand-burned them with a pyrographic burning tip. The grid work inside the individual squares can be added with the burning tip, either freehand or after measuring and marking.

When the initial burning was complete, I added texturing using a Dremel rotary tool. Coloring the squares was next. I prefer using fiber-reactive dyes, mixing them with white India ink to obtain light colors, as well as white. With the coloring complete, I re-burned the lines. Additional texturing can be done with a burning tip, engraver, or just about any texturing device.

Finishing begins by sealing with thinned brushing lacquer being careful to avoid excessive brushing that might smear or damage the color. Once sealed, I applied fifteen or more coats of lacquer. The natural wood is finished with Waterlox.

Gary Ritchie is a retired CPA living in Shelby, NC. He has been a member of the AAW since 2006, and belongs to the local woodturning clubs.

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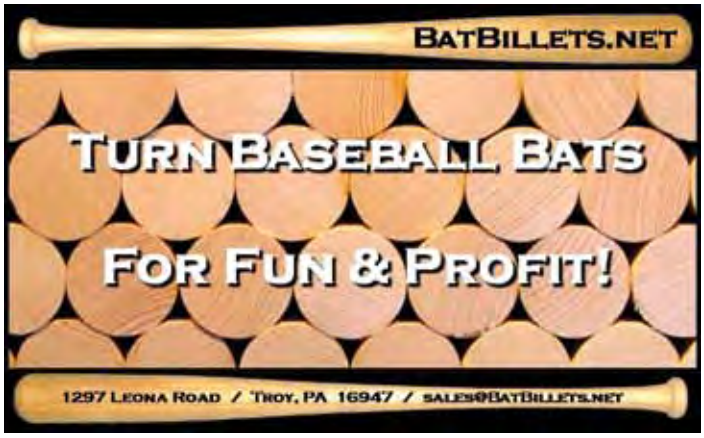

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Jim Sannerud

These bowls are made of birch from the North Shore of Lake Superior. Birch from this area is different from the birch I find anywhere else in Minnesota. It's the same species Betula papyrifera, but I call it magical wood because it yields to everything I want it to do when I work with it. The smell of this particular birch is intoxicating and I get lost in my work when turning or carving it, giving me an overwhelming sense of peace. I do not harvest healthy trees, and I use as much of the tree as possible: the bark for weaving baskets, crooks for spoons and wall hooks, and the bole of the tree for the bowls.

The organic look is achieved by turning the wood green and leaving tool marks. As the bowl dries, it goes through a dance to its final form, slightly oval with an elegant sweeping rim. The colors are achieved through layers of milk paint and burnishing the paint to make it feel warm and smooth.

Working with wood has taught me to relax about my work since nothing is perfect, no matter how hard I try to make it that way. Instead, I enjoy the creative process and accept that the imperfections help create the organic nature and form and add a human element to the work so that it feels real.
—Jim Sannerud

Bowl Stack, 2011, Birch, milk paint, organic linseed oil, 3½" × 13" (9 cm × 33 cm) (bottom bowl), 1¾" × 4" (4 cm × 10 cm) (top bowl)

Photo: Tib Shaw

More of Jim's work can be seen at jsannerud.com

REGISTRATION FORM • PAGE 1

☐ **Yes,** I am traveling to San José for the 2012 AAW Annual International Symposium June 8–10 at the San José Convention Center

Demonstrations end at 3:15 p.m. on Sunday, June 10

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