



Turn a Groovy Multiaxis Painted Mushroom

by Linda Ferber

Turning a mushroom offers a basic spindle-skills-building exercise. There are many variations to explore, including a dip into multiaxis turning. The beauty of mushrooms is that they come in an array of shapes, sizes, and colors. This diversity in the natural world opens opportunities to incorporate natural edges, pyrography, painting, and carving.

I have been turning mushrooms for over ten years and have tried all the variations I can think of. My current mushrooms range from boxes to one-off painted creations. This project is influenced by the work and teachings of Barbara Dill (multiaxis turning) and Carol Hall (dirty pour painting).

Prepare the turning stock

For this project I am using 6" × 1-3/4" square (15cm × 5cm) birch blanks (**Photo 1**). Select similar material from your wood stash. Birch is ideal because of its uniform grain, and it often has slight variations in color tone that contrast nicely with paint.

Start by marking centers at both ends with an awl or center punch. Mount the blank between centers and turn a rough cylinder with a spindle roughing gouge or spindle gouge. I like to use



Photo 1. A light-tone, fine-grain timber works best for painting—note centers located and marked.





Photo 2. After turning the blank to a rough cylinder, establish the secondary axis by moving the center at the headstock end. The offset distance need not be exact, but the author uses the diameter of her cup drive as a handy measurement.

a cup center, as it will leave a reference circle in the endgrain that will be handy when it comes time to locate the secondary axis. When roughing the cylinder, you can leave some slight flats to maximize the diameter for the off-center base of the mushroom.

Form a tenon using a parting tool. I use an Apprentice 4-jaw chuck with either the No. 1 or No. 2 jaws for small projects. Use calipers to transfer an accurate measurement from your chuck jaws to the tenon. After a little experience, you might be able to use the outside diameter of your tailstock quill or headstock spindle as a guide to estimate the approximate diameter of your tenon.

Turn the base

The secondary axis for the base of the mushroom is located by moving about one cup-center diameter away from the central axis (**Photo 2**). I move the blank at the headstock end toward me to the edge of the cup circle indent.

To turn the base, make a mark to identify the length of the mushroom stem; 1" or 1-1/2" measured from the tailstock end is about right.



Photo 3. Turn the secondary axis base for the mushroom. Make sure to remove material until you are cutting wood continuously around the new axis.

Using a spindle gouge, cut an arc below this mark at the headstock end. In this project, the blank on either side of this secondary axis section will be turned back on the original central axis. Continue turning the arc until reaching solid wood all the way through the cut. Remove enough material to establish a clean peak at the transition points (**Photo 3**). Sanding for this stem section should be done now because we will not reChuck the blank on this axis.

Multiaxis Techniques

Barbara Dill, a master of multiaxis turning, significantly influenced the author's approach to this mushroom project. For more of Dill's writing on the topic of multiaxis turning, follow one of the links below or use the AAW's [Explore!](#) tool to search for Dill's article in the publication archives ([A Systematic Approach to Multi-Axis Turning](#), AW Fall 2007).

tiny.cc/Multiaxis





Turn the stem and cap

Remount the blank using the 4-jaw chuck. This will return the blank orientation back to the original central axis. The next step is straightforward spindle turning for the stem and the slight undercutting of the mushroom cap. The chuck will also allow complete access to the top of the blank to create the smooth curve of the mushroom cap. There are no exact measurements that make this project right or wrong. Use your own sense of design, which may vary from mine.

Continuing with the spindle gouge, turn a narrow cylinder to form the stem of the mushroom (**Photo 4**). Blend the transition with the base so that the bottom of the stem sweeps outward to meet the top edge of the secondary axis base.

Slightly undercutting the cap will make the form look more natural and help with the painting step. Start with a narrow parting tool to set the diameter of the stem. The bottom of the stem with the arc curve will be the widest, reducing to its narrowest right under the cap. The parting tool used at an angle will give you a nice cut. With skill and practice a small spindle gouge presented on its side for a light shearing cut will work well for this task. The curve joining these two points should be gentle and flowing.

Turn the top of the mushroom, using shearing cuts with the spindle gouge starting at the outer rim and cutting towards the tip. The cap should be fairly thin with the bottom curve matching the top curve. Dirty pour painting will be most successful with a relatively shallow slope on the top of the mushroom—ten degrees or less. The paint cells created in the dirty pour process work best when gravity does not distort the wet the paint, as would happen with a steep mushroom cap.

Keep the tailstock in place as long as you can, as this will provide support for the cut and reduce vibration. To finish the top, you will need to



Photo 4. With the blank re-mounted on its original axis, turn the mushroom stem and shape the top.



Photo 5. Remove the tailstock to complete the top of the mushroom. Sand the entire form using a light touch.

retract the tailstock and make a series of gentle cuts to remove the nub at the top and blend the surfaces (**Photo 5**).

Sand the stem and mushroom cap to completion. Use a gentle touch, letting the abrasive do the work, and avoid putting too much stress on the stem.



PROJECT: Painted mushroom



Photos 6, 7. Part off the mushroom with a parting tool below the widest diameter of the secondary axis base. The completed mushrooms should sit solidly on their off-axis bases.

Part-off

I use a cover over the point of the tailstock for added support (and to protect the top of the mushroom) while parting-off (**Photo 6**). Part the mushroom about 1/4" (6mm) below the widest part of the arc—on the headstock side of the piece—creating a flat base on which the mushroom will sit (**Photo 7**).

Decoration

The dirty pour inspiration comes from Carol Hall's demonstration at the 2018 AAW Symposium in Raleigh. The objective is to create an eye-catching, multi-colored mushroom cap—think *Alice in Wonderland* (**Photo 8**). You achieve this by layering various colors of acrylic in a container that is smaller in diameter than your mushroom cap. Some of the paint colors will be modified with additives (like WD-40) that make them repellent to the non-modified colors. The modified colors will rise to the top of the paint layers and create cells of color. The dirty pour process is easy, but I recommend reviewing Carol Hall's video (see sidebar, next page) to fully grasp the technique.

You will need three or four colors of acrylic paint, flow medium, and silicone (liquid or spray). These supplies can be purchased at retail or online craft suppliers (**Photo 9**). Painter's tape, small plastic containers, disposable gloves, and stirring sticks will be needed. I have a cardboard box with a grate prepared for the pour; the grate allows paint to drain away from the base of the mushroom. You will also need to protect your work surfaces and, unless you want



Photo 8. The distinct islands of paint are "cells," created by additives in some of the paint colors that discourage their blending with neighboring colors.



Photo 9. Supplies assembled for the dirty pour decoration. This gets messy, so cover yourself and your work space, too.



PROJECT: Painted mushroom

to look like a psychedelic experiment, a way to protect your hands and clothes.

The containers for this project will need to hold a much smaller quantity of paint than the projects illustrated in Carol Hall's video. I found a package of small containers with covers to mix the acrylic paint and additives; yogurt cups also work. Containers with lids are convenient for storing the premixed paint for future projects. I selected my dominant colors—black, white, grey metallic, and gold metallic. I can add additional colors to this base plus a little metallic pigment for extra punch. For the pour, I use caps from empty acrylic paint jars. Stir sticks are handy, using one per color. Selecting colors is fun and you can experiment, but you can find color wheels online for some guidance for pairing colors.

Paint the top

From the covered containers of premixed paint, select four colors. The first color will be your base. Add smaller amounts of the next three colors with only a dollop or two of the last color. Draw an x through the paint with a stir stick. Let the mixture sit for a couple of minutes.

While you are waiting, prepare your mushroom, protecting the areas you do not want painted with blue or green painters' tape, and I mean cover it all but the top and bottom of the cap. Pouring paint is messy! After you have masked the mushroom with tape, make sure it can stand upright.

Place the mushroom top-down over the container filled with paint, flip the pair upright and set them on your grate inside the box (**Photo 10**). Wait a minute or two to allow the paint cells to start forming. Now lift the container and let the paint pour, giving it guidance by rotating the mushroom to make sure paint covers the entire area. The paint cells give the project a unique organic look. If no cells formed don't worry, just wipe off the paint while it is wet and try again. If the pour is successful, gently wipe the underside edges with your finger to remove excess paint or drips.



Photo 10. Cups of paint inverted over prepped mushrooms. Note the painter's tape and the re-purposed oven racks to allow paint to drain away.

It can take quite a while for the thick coat of paint to dry—be patient and give it adequate time. When the paint is dry, remove the painter's tape. If paint has seeped into unwanted spots, gentle sanding should clean it up. To complete the project, I add some simple lines using pyrography on the underside of the cap. I find little touches like this add to the work, plus these lines blend any small ridge of paint around the inside perimeter with the stem.

Linda Ferber recently retired from her position as AAW's Program Director. She is the founding editor of Woodturning FUNDamentals.

Dirty Pour

Carol Hall demonstrated her dirty pour painting technique at the 2018 AAW Symposium. If you missed the event, check out Hall's "Getting started with color" (Woodturning FUNDamentals, Nov. 2019 (V8N4), available from [AAW's online archives](#) at woodturner.org). You can also review her instructional video on the topic by using one of these links.

<http://tiny.cc/DirtyPour>

