

Malcolm Zander

mzander@magma.ca

malcolmzander.com

613-226-5041

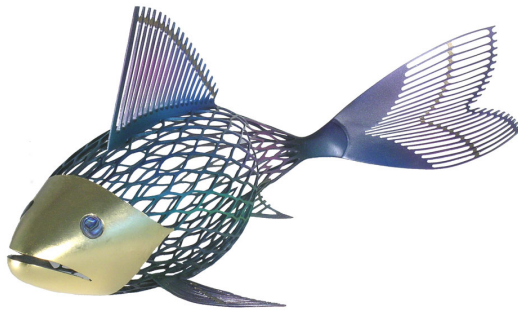
Ottawa, Ontario Canada

I began turning in 2000. Obviously I have a lace fetish. This I blame on Binh Pho, whose seminar in Albany I attended in 2003, after which I immediately went out and bought a dental drill and compressor and airbrush. The lesson is to attend as many woodturning conferences as you can, because you never know where one demonstration may lead you.

I am very interested in form, seeing different manifestations of form in wood, fibre, glass, and ceramic art, and I am exploring these differences and similarities in my turning, together with the influences of texture and colour.

Woodturning for me is a very rewarding pursuit because in a relatively short period of time one can produce something of real beauty. Of course, from the sweep of the Grand Canyon to the structure of a microbe to the form of a flower, the greatest artist of all is nature. We cannot compete with nature, but we can be inspired by it.





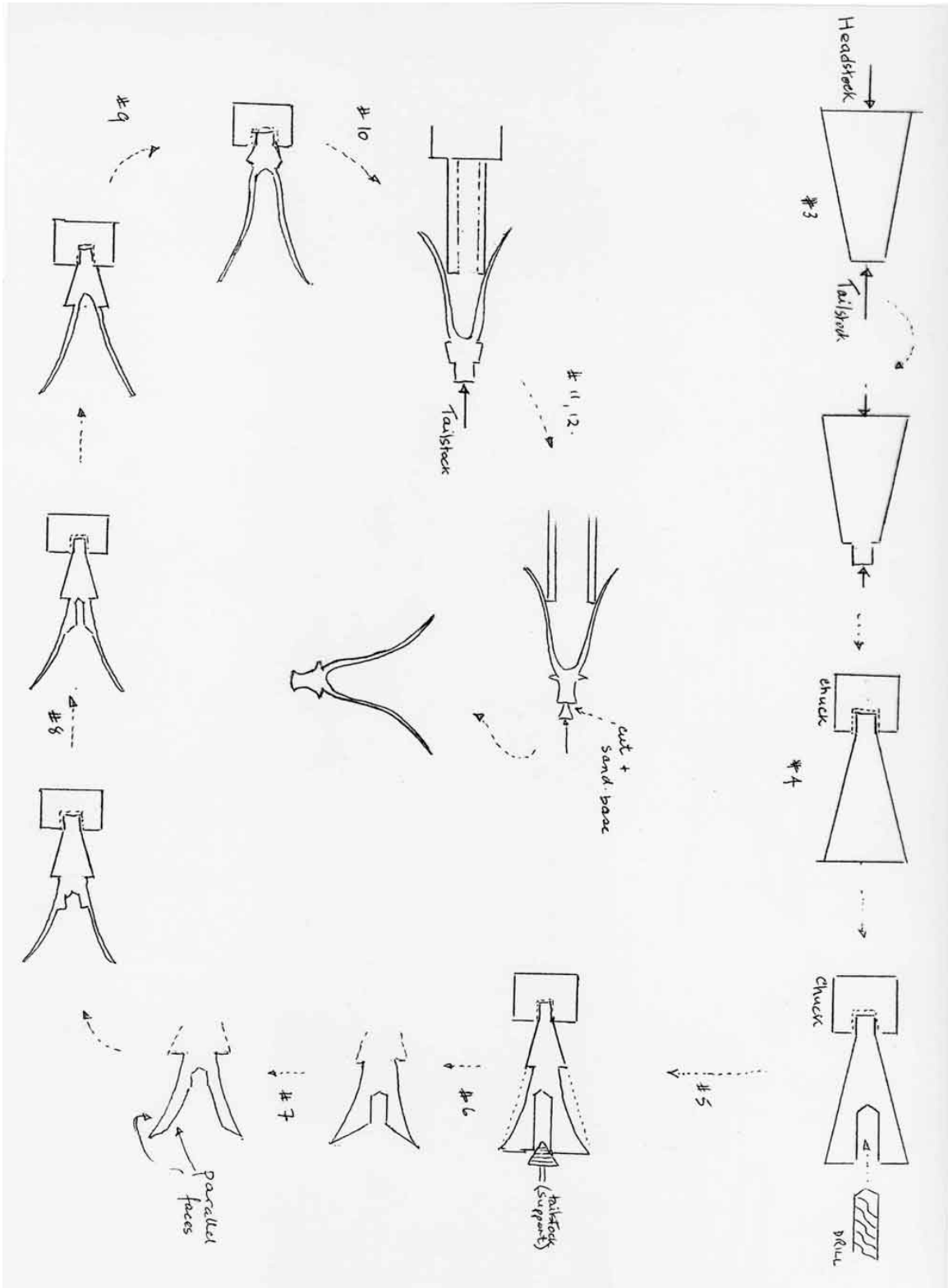
Thin-Walled and Pierced

In this demonstration I will discuss the turning and piercing, from dry wood, of thin-walled pieces. I will begin by explaining how I came to do this type of work and how I have evolved, and will describe how some of the more interesting pieces were made. This portion of the presentation will be done with slides.

The technique used to turn thin walls cross-grain, using dry wood and a gouge only, will be shown in a short live demonstration with a natural edge bowl, and further illustrated with slides and a short movie. The identical technique can be used to make a small vase form, and a detailed handout is provided further below for those who wish to make one. This will be of interest to the intermediate or experienced beginner turner.

Techniques for piercing will be discussed and shown, along with equipment, tools and files used, in a second movie.

Making a small thin-walled vase



1. Use a dense fine-grained dry hardwood. Unless you have special tools, it will be easier to turn thin walls with cross-grain, rather than end-grain.
2. Band-saw your blank and mount it between centers. If your vase is to have a natural-edge top, adjust the orientation to ensure that at least one of the top planes is square to the lathe axis.
3. Turn a cylinder and then reduce one end in diameter so as to give a cone shape. Do not make it too thin at this point. Turn a good tenon on the smaller end (do this on the tailstock side).
4. Remove the turning and insert the tenon into a headstock collet chuck and tighten well. Drill out the top of the vase to a distance of about halfway down.
5. Refine the outside of the form, to give a smooth curve from the top end of the piece down toward where the foot will be. Do this only for the top 2/3 – the bottom 1/3 of the form will be finished later. Sand to about 180 grit to take out irregularities.
6. Take the center out, bearing in mind that nearly all the mass of the piece is in the top portion of it and if you are too aggressive you can snap the piece off the chuck. Taper the drilled hole down to make a cone, taking off just a little at a time. For this use the 60° fingernail gouge. Shave down and expand this cone until the top outer wall thickness of the piece is about 1/4 of the top diameter. Then switch to the 45° fingernail gouge. Be very careful in using this gouge to rub the bevel heel first, and then slowly lower the tip into the cutting position. Otherwise you risk a catch, which will snap the turning off. There is one exception to this – if you are doing a natural-edge piece, in which case you need to enter with the sharp point, slowly, right on the center-line of the piece, to engage the whirling erratic natural edge.
7. Continue to shave down the inner wall, ensuring that the inner wall is parallel to the finished outer wall. Use calipers to verify this. Once you have done this, you can either continue to sight down the form wall to get the correct line, or you can simply monitor the thickness of the ridge on the inside opposite wall. When you are down to 2-3 mm thick, sharpen the 45° gouge and then make your last couple of finishing cuts to reach the final thickness.
8. Repeat the process, going deeper into the vessel. Sand as much as you can. Once you are about halfway down the inside of the piece and much of the top mass has been removed, you can now complete the outside profile, down to near the tenon. Sand the whole exterior to about 180-220 grit. Sand to a higher level if you like.
9. Finish taking down the internal center to the final depth. You may need to drill the hole deeper now. Sand now if you can reach in easily, otherwise sand later with a Dremel or Foredom and split pin flapwheel.
10. Remove piece from chuck and reverse onto a firmly cushioned support in the chuck. Bring up the tailstock into the hole left in the base of the tenon, thus ensuring that the piece is centered.
11. Reduce the tenon diameter, with a 1/2" 60° gouge or smaller 3/8" gouge, taking off only a little at a time (otherwise the friction fit on the chuck will be insufficient to hold the piece, and you will spin it on the chuck and score or mark the finished interior). Finally, use a 3/8" or 1/4" detail gouge to refine the cove and generate the final form. Shorten the foot a little. Power sand the whole exterior to the final finish.
12. With the detail gouge facing horizontally left (never upward), shave the foot base inward as far as you can go, making it slightly concave and then stop the lathe. Cut off the little nub on the base and finish the concave bottom off the lathe with a Foredom or Dremel bit, then sand. Alternatively, if you have a vacuum chuck and at Step #10 you have reversed the piece onto this chuck, you can turn on the vacuum and finish the base on the lathe. This has the advantage of also permitting the drilling of a hole in the base and installing a rare-earth magnet in the foot underneath a wooden plug so piece can sit on a magnetized stand.

