



# EVOLUTION OF A GOBLET DESIGN

Bill Ooms

**T**he quest for the perfect goblet became a lesson in how to critique my own work. Often, I have not been pleased with transitions between the various parts of the goblets I have turned, so I designed a pleasing bulb, and then made multiple stems and bases to explore combinations. At each stage, I took photos and discussed the results with my brother and my wife. I soon realized there are no specific rules and others will make different choices. Experiment, make numerous goblets, and develop your own style.

## Learn from others

My brother and I spent more than an hour looking at and discussing the merits of wood-turned goblets pictured on the Internet. We both agreed that Don Leyden's goblet with its two small beads at the top of the stem was well designed. We noted details such as the curve of the bead as it joined the stem, mirroring the curve at the bottom of the bulb to create a pleasing flow from the bulb into the top portion of the stem.

## The bulb

I started with an image of a glass goblet and tweaked it using Photoshop. Satisfied with the design, I printed a full-scale copy of the final version and used it as a template to turn the bulb of the goblet.

I selected a piece of bloodwood and headed to the lathe to turn the

bulb's exterior shape. I added a band of silver around the rim. The band is W-shaped, like an accordion bellows, and is half-annealed to be springy, allowing expansion and contraction with the wood. The band is held in place by a retaining ring of wood of matching grain.

I hollowed the interior, re-mounted the piece onto a jam chuck, turned the exterior to its final shape, and cut a pattern using an ornamental lathe. I was happy with the bulb, so I proceeded to the design considerations for the stem and base. To allow trial assembly with various stems, the bottom of the bulb has a  $\frac{3}{8}$ " tenon that will mate with a hole in the top of the stems.

## Stem: Decorated or plain?

I am an ornamental turner, so there is always a temptation to decorate every part of a piece. That can, however, make the piece look too busy. I started with maple and cut a number of blanks, rough turned them, and drilled a hole in the top to match the bulb's tenon.

I tried three different stem designs: straight fluted, spiral fluted, and plain turned (*Photo 1*). The straight flutes did not seem to fit with the pattern on the bulb and the spiral flutes did not blend well with the bulb's facets. For this bulb, an unadorned stem worked best.

For the first two fluted stems, I turned their profiles separate from

**Bill Ooms,**  
*Ceremonial Goblet, 2013,*  
Bloodwood, African  
blackwood, sterling  
silver,  $7\frac{1}{2}$ " x 3" dia  
(19cm x 8cm dia)

the bulb and applied the ornamentation. When paired with the bulb, I realized the flow did not work well with the shape of the bulb. It would be best to design the stem while it was attached to the bulb. Rather than risk ruining the bloodwood bulb, I turned another bulb of the same shape out of scrap wood, and turned the third stem while it was attached to the bulb. It was much easier to achieve a pleasing transition (*Photo 2*).

**Bulb-to-stem transition**

I tried a number of different options for the top of the stem (*Photo 3*). The first has a 1"-diameter top. I did not like the bulk at the top; it was crowding too close to the ornamentation. The second stem was 0.9" at the top, which allowed room between the ornamentation and the beginning of the stem.

The third stem had the same shape as the second, plus the addition of ring features. I thought the features were too subtle, so I made them more pronounced on the fourth stem. Taking it one step further, the fifth stem had a 0.8" top and even more pronounced ring features. This last

one also had a delicate appearance I was aiming for.

Note that on the fourth and fifth stems, the bottom edges of the ring features follow the shape of the bottom of the bulb. Relatively minor details like this help achieve an attractive design.

**Dark or light?**

It was easy to blacken one stem using a marker (*Photo 4*). I thought either would be a good choice, but I decided to stay with my original concept of African blackwood. Black is also elegant.

**Getting down to the base**

Again, I used maple for the three examples (*Photo 5*). In the photo, the joint between the stem and base is visible, but on the final design the joint will not show. All of the bases have the same diameter, which is approximately the same diameter as the silver on the rim. I liked the size of the base, so I did not experiment with diameter.

The first base (left in photo) has a pleasing curve between the stem and the base. The second is a bit shorter.



Inspiration for the goblet design came from a photo I stretched out using Photoshop.

The third base has the same profile as the second, with the addition of a feature to mirror the features at the top of the stem. Adding the feature, however, made the base too flat.

At this point, looking at the overall goblet, it appeared to be a blend of two different goblets. The plain base did not work well with the ornate ▶



(1) Three options for surface design on the stem: straight flutes, spiral flutes, and plain.

(2) Matching the curvature of the stem to that of the bulb was easier with the bulb and stem attached.

(3) Options for the stem as it meets the bulb



4 I compared lighter wood versus darker wood for the stem.



5 Options for the base



6 I added ornamentation to the base and two touches of silver to the stem.

bulb. To make the parts compatible, I added ornamentation onto the base that echoed the pattern on the bulb (*Photo 6*).

I wanted a few more touches of silver, but I did not want to include too much sparkly ornamentation to the stem or base and cause a distraction. Two small bright touches would sufficiently complement the silver on the rim. I wrapped a bit of twisted silver wire around the stem at two points. The silver at the top of the stem, however, made it look like I was trying to hide the joint. In the end, I moved the silver down to the next groove.

At this point, it became apparent that having the narrow part of the stem at the lowest point of the stem did not look right, so I had the narrowest point about one-third of the way up on the final stem.

### The final design

It was time to make the final stem and base out of blackwood, and I tweaked the design slightly, based on the prototypes. On the stem, I made the groove near the base a bit deeper so the silver would be recessed. That silver ring is at the joint between the stem and the base. In order to get the top silver ring in place, I added a small feature above

it, which is a separate piece like a washer.

Usually, we proceed through options that present themselves as our work evolves. Sometimes, however, it can help to see the options side by side in a series of pictures. A similar approach will work for designing finials for boxes and hollow forms and bases for bowls and vases.

Often, we see a final piece of work and think the artist just happened to have it all come together on the first try. This might be the case for a few exceptional people, but not for me. Most of my work is an evolution that includes many prototypes. Once you take the time to explore the possible variations on a design, those options become part of your toolbox to apply to the next piece of work. ■

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*Bill Ooms learned woodworking from his father. After a career as an engineer, Bill became a full-time woodworker. He works with rose engine and ornamental turning, which combines his woodturning skills with his math and engineering background. [billooms.com](http://billooms.com).*

*Bill will be a demonstrator at the Phoenix symposium in June. His goblet will be in the POP invitational exhibit, "Ceremony," and will be auctioned off during the POP auction on Saturday, June 14.*



**Don Leydens**, *Buckeye Goblet*, 2012, Buckeye burl, walnut, dye, 13½" × 4½" dia (34cm × 11cm)