

Jeannette Rein
Jason Schneider
Curt Theobald
Linda VanGehuchten
Kimberly Winkle
Malcolm Zander

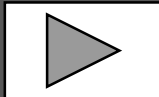
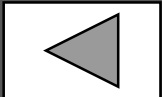
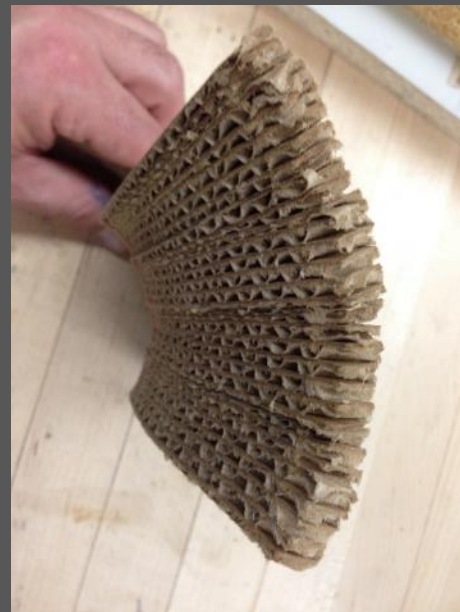
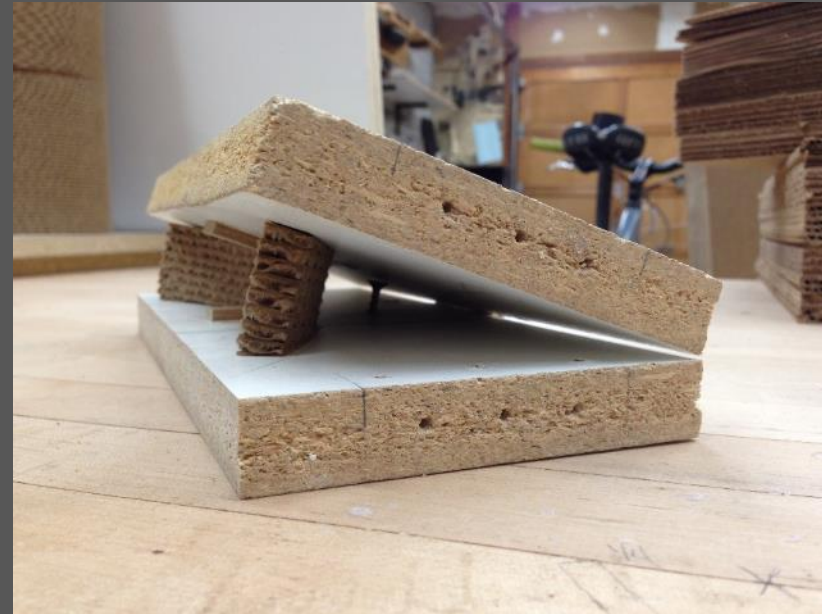
Process Images

Creativity in Construction: A Collaboration of Materials

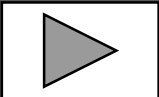
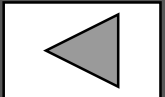
As part of this exhibition, artists were invited to include information about process. The artists listed on the left provided images.

Written statements are in the exhibition catalog and on the pedestals.

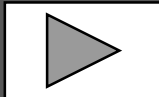
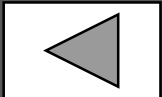
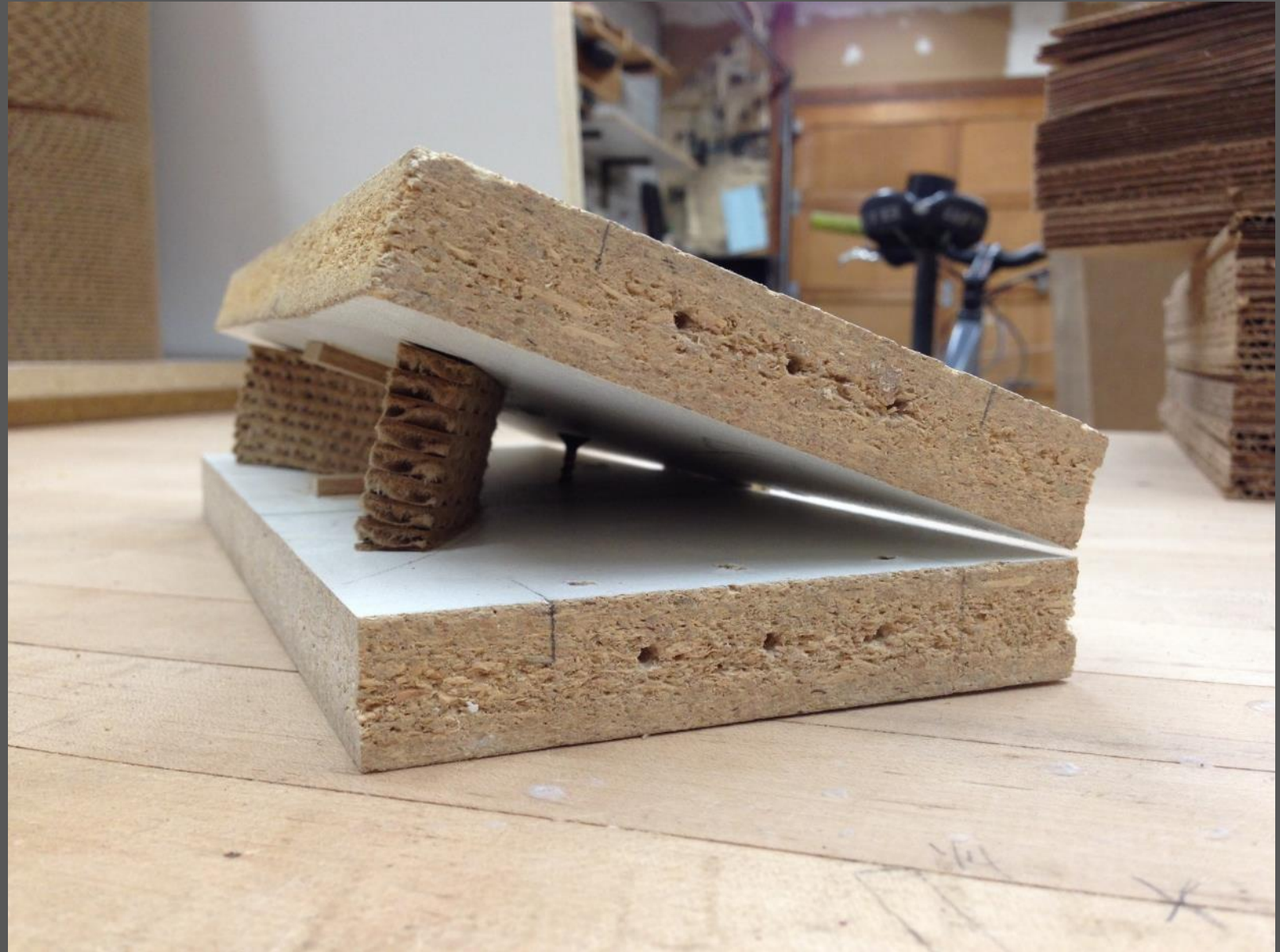
Jason Schneider
Homage to Prestini



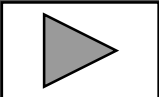
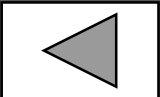
Jason Schneider
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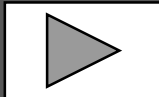
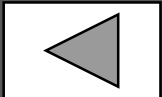
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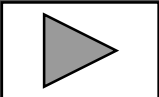
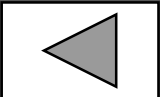
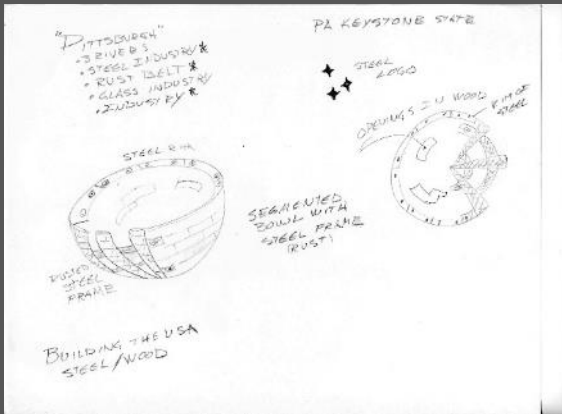
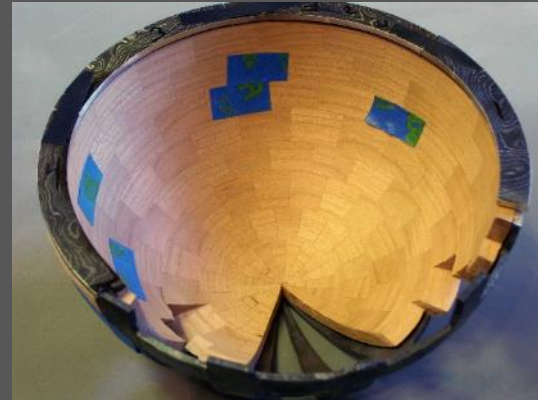
Jason Schneider
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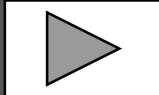
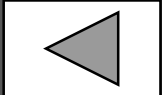
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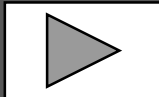
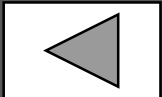
A curved, segmented wooden structure, possibly a prosthetic or a model, with metal bands and fasteners. The structure is made of light-colored wood, possibly birch, and is composed of several rectangular segments joined together. It is held together by a metal band with visible screws. The structure is shown against a dark background.



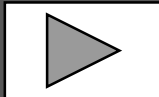
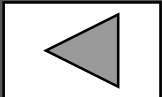
Curt Theobald
Rivers of Steel



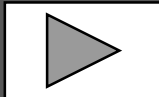
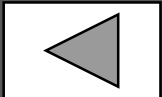
Curt Theobald
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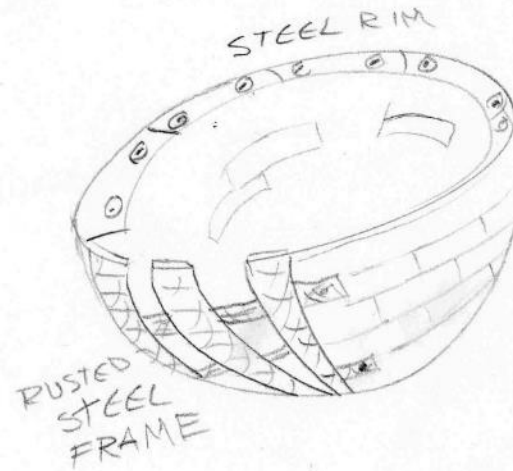


Curt Theobald
Rivers of Steel



Curt Theobald
Rivers of Steel

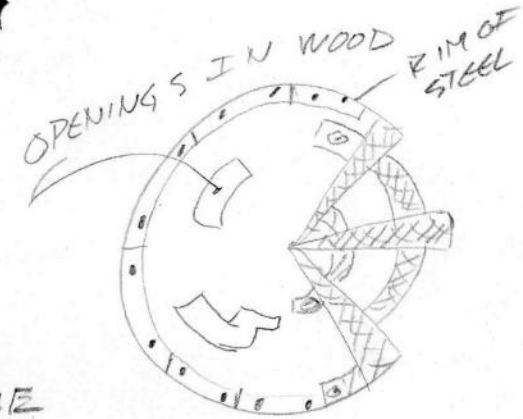
"PITTSBURGH"
• 3 RIVERS
• STEEL INDUSTRY *
• RUST BELT *
• GLASS INDUSTRY
• INDUSTRY *



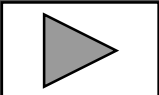
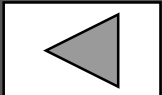
BUILDING THE USA
STEEL / WOOD

PA KEYSTONE STATE

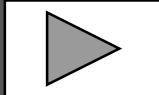
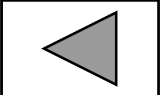
STEEL
LOGO



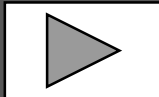
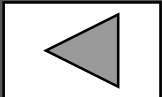
SEGMENTED
BOWL WITH
STEEL FRAME
(RUST)



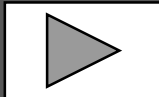
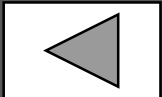
Linda VanGehuchten
Trillium Sisters in Step



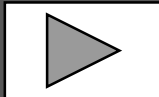
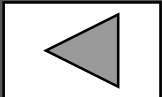
Linda VanGehuchten
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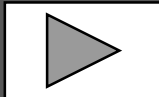
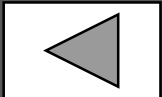
Linda VanGehuchten
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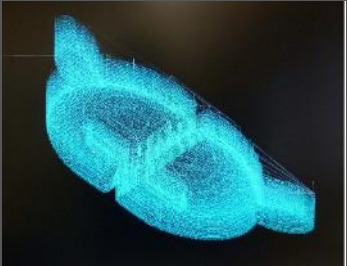
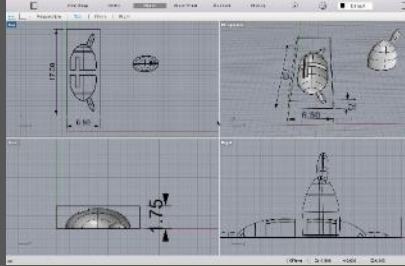


Linda VanGehuchten
Trillium Sisters in Step



Kimberly Winkle

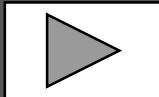
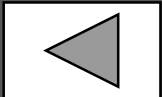
Binary



KIMBERLY WINKLE

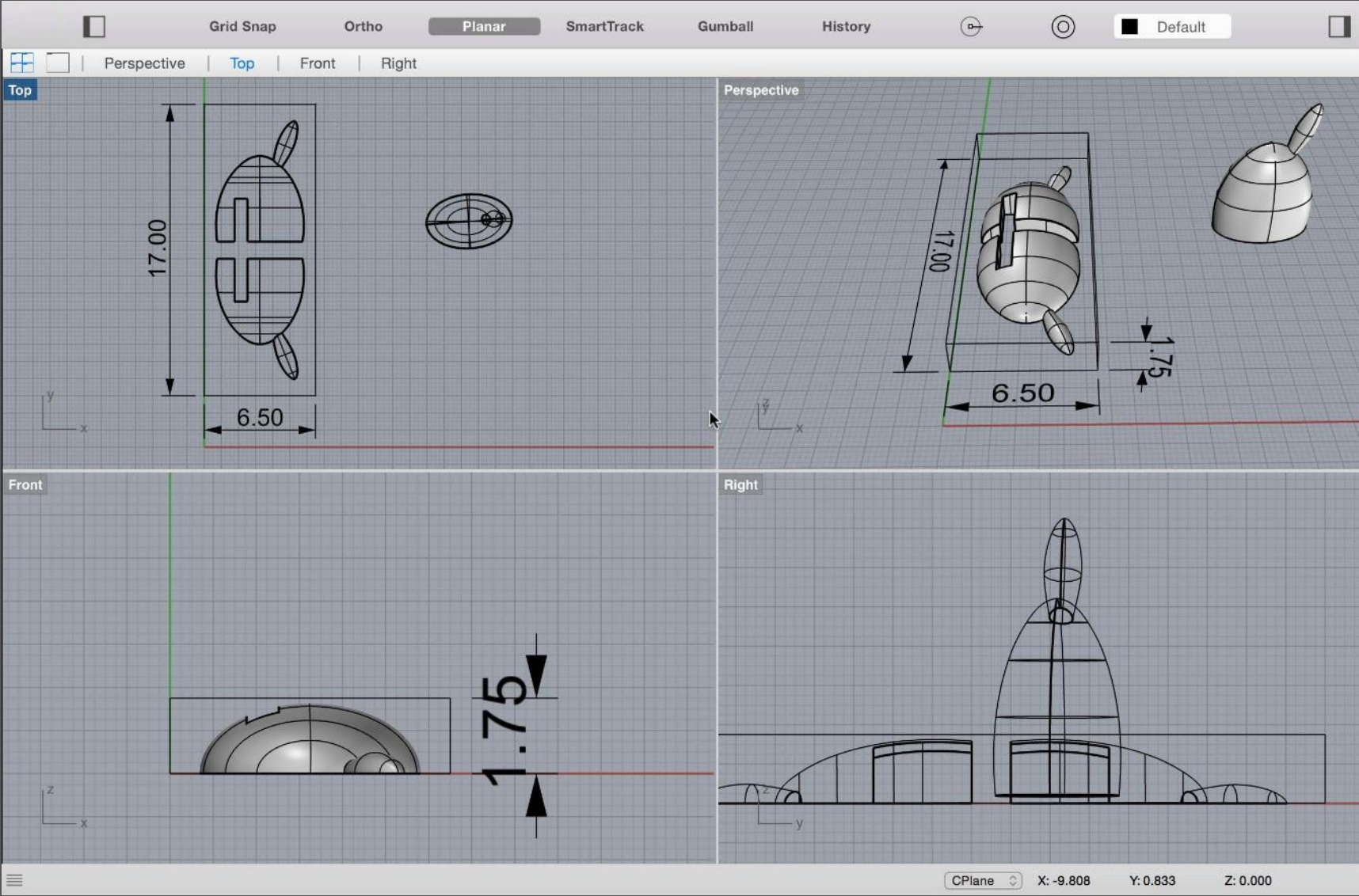
Binary

Binary was inspired by the confluence of modalities of making; in this case, digital and traditional. The original form was modeled using a CAD (computer aided design) program, and subsequently, carved from a solid block of wood using a CNC (computer numerical control) router. While the CNC efficiently translates the CAD image, the technology's limitations are also revealed in the process and outcome. In response, the CAD form was reproduced using traditional analog techniques (turning and carving), which allowed for increased control, detail and improvisation. In the end, the collaboration of techniques results in a duet of forms that simultaneously look forward while also celebrating tradition.

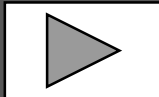
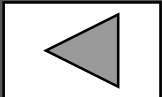
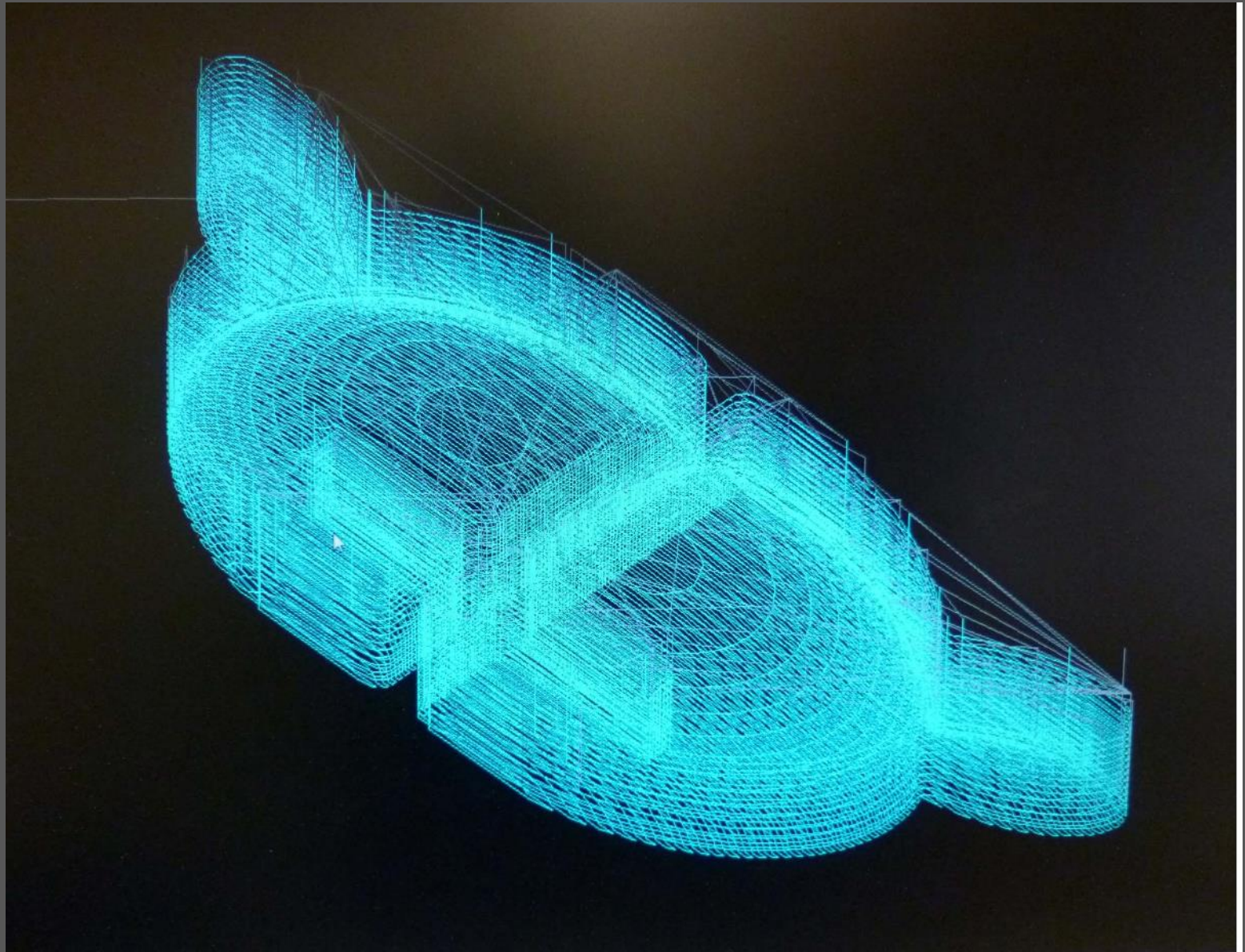


Kimberly Winkle

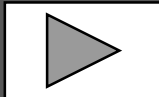
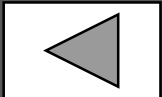
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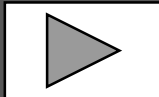
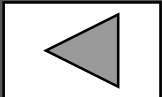
Kimberly Winkle
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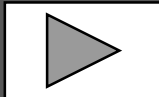
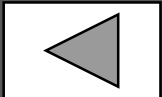
Kimberly Winkle
Binary



Kimberly Winkle
Binary



Kimberly Winkle
Binary



A red, wireframe-style teapot by Shigeo Fukuda. The teapot has a high, slender neck with a small, rounded finial on top. The body is wide and shallow, with a complex, woven wireframe structure. It has a curved handle on the left and a curved spout on the right. The teapot is placed on a white surface, casting a shadow that shows the intricate wireframe pattern. The background is a plain, light-colored wall.



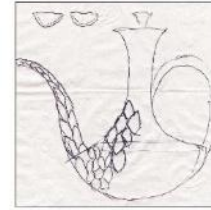
Malcolm Zander

Dressed for Dinner

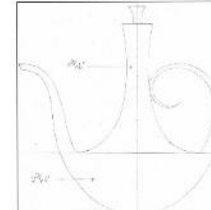
Dressed for Dinner

The Making

Many years ago I owned a coffee pot (long since gone) whose form appealed to me. Recently when at the pub after a tennis game a friend asked what I planned to make next. The image of this vessel came into my head. I immediately made a crude sketch on a paper napkin. Shortly afterwards I made a proper working drawing, and began the project.



Napkin Sketch



Working Drawing

Two or three years back Betty Scarpino wrote an editorial in the *American Woodturner* in which she advocated using one's best wood now, instead of saving it for some special occasion which may never come. So I heeded her advice and took out the remaining 90-pound half of my treasured pink ivory log, bought in 2004, and steeled myself to take the chainsaw to it. When first bought the log was wet and had a number of checks in it, so had been coated with wax emulsion and cyanoacrylate glue to conserve it. I found that after ten years it had dried out, and that

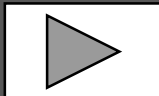
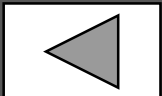


the cracks were substantial.

There was one section which was check-free on one end of the log, but which had serious checking on the other end. From this I handsawed out a cylinder with dimensions slightly greater than those of the planned piece. It was 11" long x 6.25" diameter and weighed 6.4kg.

The new piece would be pierced all over, which required a wall thickness of about 1mm. The question of how to turn such a thin-walled body with a long narrow neck and very sharp discontinuity at the belly preoccupied me for some time. There is no hollowing tool that could do this. Often I lie awake in the small hours of the night thinking about the creative and technical problems of a piece, trying to work out the best solution. The answer usually drops into my head a while later. We have all experienced this. As I understand it, it is due to the removal of inhibitions to one's thinking when one is only half awake - good for creativity, which is often smothered by critical thinking in the cold hard light of day. For my piece, this is how the solution came to me; I would make the body in two parts. A long necked upper portion with a wide flange, glued onto a hemispherical lower portion.

The check-free bottom third of the cylinder was therefore cut off and turned into a thin-walled hemispherical bowl, which was set aside. This was the easy part.



Malcolm Zander

Dressed for Dinner

The top section, which contained most of the checking in the wood, was bandsawn crudely into an approximate shape, and mounted on the lathe. As can be seen, the many checks were soaked in cyanoacrylate glue to help hold it together during the careful turning, and it was supported by the tailstock. My hope was that the majority of the defects would be removed during the turning process, and this in fact was the case, with just one small defect remaining on the wide flange. I knew that I could eliminate this in the piercing later.



Bandsawn Top



Checking wall thickness with light



Refining form and hollowing it



Laser dot showing extent of hollowing

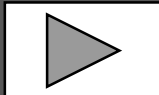
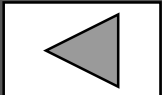


Top and bottom sections prior to gluing together



Note black defect in flange – this will disappear in piercing

The top and bottom portions of the body were glued together, using epoxy glue. I have learned from the segmenter artists that the stability of a glue joint requires having wood grain running in the same direction; here both top and bottom sections of the vessel are turned end-grain and are cut from the same piece of wood, so I knew that there would be no problem of joint failure. I also used epoxy glue instead of cyanoacrylate (CA) because the museum conservators tell us that CA glue has a limited lifetime.



Malcolm Zander

Dressed for Dinner

Now I had to figure out how to make a thin-walled spout and handle, neither of which could be entirely made on the lathe. After much reflection I decided that the best way would be to make a solid form, cut it in half, carve out the interior of each half and glue the halves back together, and then attach the resulting curved hollow tube to the vessel body with a turned cone form.



I experimented with a number of cone variations, using baked polymer clay for the spout as shown in the adjacent photo, and decided on the one which looked best. I also decided to have a discontinuous line instead of a smooth curve where the cone abutted the neck. I turned a pair of thin-walled cones to the preferred form.

For the spout, instead of trying to cleanly cut in two a small solid form, I took two flat belt-sanded sheets of pink ivory and glued them together with hot-melt glue. The solid form was bandsawn out and then shaped by sanding and carving. A hairdryer allowed me to re-melt the glue and separate the two halves. Each half was then carefully hollowed using a series of rotary burs, and the two halves glued back together with epoxy along the thin edges, making a thin-walled tube which was then glued onto the cone, with some tweaking to ensure that the line of the curve was smooth and that it blended with the curve of the body to which it would be attached.



Sanding the spout



Cone with spout halves, one hollowed



Re-glued hollow spout

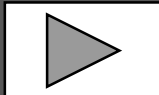
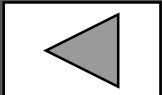


Gusset made to fit front of spout



Completed spout

A gusset was made to fill the gap where the cone had been sliced, and was formed in two planes to follow the upward curve of the vessel belly as well as the circumferential curve of the perimeter. The finished spout was taped to the body, a pattern drawn, and pierced. (I pierced the upper sections of both spout and handle before I attached them to the body, as access to the back side will be easier, especially for the handle).



Malcolm Zander

Dressed for Dinner

The handle was made in a similar way, except that it was truncated, and the hollowing stopped short of the curved tip. This was because the handle tapers to a very thin semicircle which can no longer be hollowed out. This last tip section would be made separately and glued on. I did not want to make it from pink ivory because the grain at several points would be weak. Better to take an end-grain piece of wood and bend it to the curve.

The best way to do this is with compressed wood, which can be bent to a very tight radius just by wetting it, with no steaming required. A wet piece of compressed cherry with the appropriate taper was bent to shape in a mold and dried. It was then saturated with CA glue to harden it and prevent any slight unfolding which could push against and possibly break one of the fragile neck columns. It was epoxied to the truncated handle and the join cleaned up so it was smooth and flush. It would be painted later to match the colour of the pink ivory.



Forming tail in mold



Checking tail curvature



After attachment to rest of handle

I next pierced the body. I decided that the piercing pattern on my original pub sketch would not work well on the thin neck, so I opted for a columnar motif. This will also match the linear pattern on the spout and handle. I laid out a grid of 24 equally spaced lines, using the indexing wheel on the lathe, which I calculated would give me a piercing pattern repeat of just under 3mm.

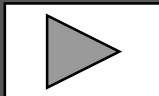
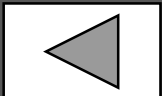


Outlining columnar pattern



One panel left to pierce

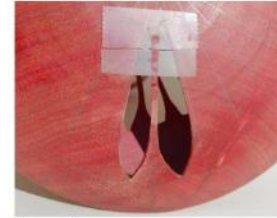
The columnar neck piercing was delicate and stressful and required intense concentration. I had to be very careful holding the neck because it is so easy to crush it. A momentary lapse and it is ruined. I held my breath while cutting each slot. Each slot was sanded clean. I did at most four in a day. The last one I saved for a morning when I was fresh, as it was especially delicate being unsupported by solid wood on each side.



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I had planned to now attach the spout and handle but realized that when I turned the piece over to pierce the bottom they would get in the way and possibly break off. So I decided to add them at the very end. I began piercing the bottom, having decided to use the same long petal pattern as for the top. Again, each piercing individually sanded and filed. I had to hold the inverted form very gently to avoid crushing the fragile neck. On sanding the second piercing I put too much pressure on the side of a strut and it snapped! A fragment flew into the lap of my turning smock and was contained (one reason why I wear it). Fortunate to retrieve it. Too stressed to think to take a photo. I epoxied it back into place, and quit for the day.



Strut repair

Is this section going to be a problem? I decided to make the rest of the struts slightly wider, to be on the safe side.

Another concern was the stability of the piece. In the initial turning I left a small flat on the bottom of the hemispherical base so that the teapot would sit upright. This had to be subtle so as not to disrupt the curve of the body and spoil the form. The piece does sit upright. But what will happen when the base is completely pierced and there is no significant mass left in it? Will it tip over? The handle and spout will need to be perfectly balanced on either side of the neck.

The main part of the base was pierced without further mishap. Next I sketched a couple of patterns on the remaining solid body. The first pattern was aesthetically nicer, but technically risky and did not blend the top and bottom of the piece well. The second option was less artistic but simpler and safer and did blend the top and bottom well. I chose the second pattern. Ambivalent about this decision.



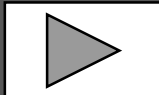
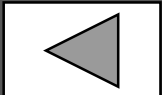
Base partly pierced

The remainder of the body was pierced and then hand sanded all over to remove pencil marks which might show through the acrylic finish later.

The last major hurdle was the attachment of the spout and handle. Both were taped into place onto the body and a fine pencil outline drawn around each of them. I then cut out two sections slightly smaller than the outlines. (Several panels were left unpierced to provide support for the gluing and for the tape. They will be pierced next).



Cutouts for spout and handle



Malcolm Zander

Dressed for Dinner



The spout and handle were epoxied into place. There will be very little holding them there once I have carved and pierced around them, but the joins are end-grain to end-grain and will be sound.

The bases of the spout and handle were now pierced, after considering the design of the piercing pattern to ensure it integrates into the pattern of the remainder of the teapot.

A lid was turned from a piece of pink ivory, hollowed, and fitted into the collar of the pot. It adds a little more formality to the already formal columnar neck.

The completed piece was indeed stable and did stand up (phew!). It was (gingerly) blasted with compressed air at 30 psi to remove any remaining sanding dust, and then airbrushed with acrylic quinacridone red, which is the identical colour to pink ivory wood. Most woods change colour with time, the exotics especially so. Unlike pink ivory, however, the quinacridone red pigment used here is lightfast, so will not fade. The owner of the piece will still know that it is made from this rare and precious tropical hardwood.

A half-dozen coats of nitrocellulose lacquer were airbrushed over the piece to protect the finish.

Finally I placed eleven small pearls nestled in the base.

What are they doing there?

What kind of container is this?

A Vessel of Dreams?

A Vessel of Enchantment?

Or.....?

Dressed for Dinner has dimensions of 7.25" high x 6.75" long x 5.25" wide, weighing 20g. Of the 6440g weight of the initial cylinder, 6220g (99.7%) has been removed. In its making there were many creative challenges such as the form and balance of the body and the design of the piercing patterns, and many technical challenges such as the construction of the spout and handle and their attachment to and alignment with the body. It was a lot of work. But it was also enjoyable and rewarding in being able to solve these problems and complete it.

