Turning Teapots

By Robin Goodman

Teapots seem to have originated in China over 500 years ago. They were usually designed for an individual drinker, so were very small and the Chinese used to drink direct from the spout. They started to export tea to Europe and included porcelain teapots.

It was not until the middle of the 18th century that English craftsmen mastered how to make porcelain teapots. A whole new industry sprouted, and Stoke-on-Trent became the source of much of the English fine bone teapots. Silver also became a popular material for teapots.

Wood has been used for drinking vessels and plates for thousands of years. Nowadays some turners apply a waterproof food-safe finish to goblets so they can be used, but wood is not great for teapots with boiling water, so they are generally turned for decorative use only.

I turned my first teapot a few years ago and during the coronavirus lockdown decided to make several more in a variety of shapes using different techniques and decoration :-

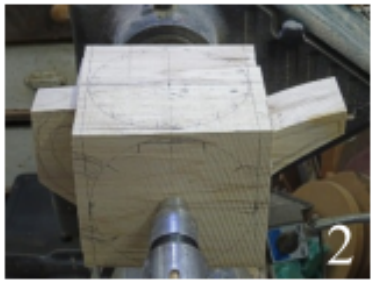
A. Traditional teapot with no colour or decoration.
B. All-in-one teapot, 2 axes, decorated.
C. Multi-axis Curved Rectangular teapot, 2 versions with different shape, texturing and colouring.
D. Victorian shaped teapot with blue decoration.

Teapots A and D were relatively straightforward to make, so I will only go into significant details of turning and decoration of the other more involved pieces :-

A. **Traditional teapot – photo 1**. Turning the body is straightforward, as for a hollow form. Forming the handle and spout are time consuming and is mainly by carving and sanding. Obtaining a close fit against the body surface, curved in both directions, is not easy. A cardboard cut out template of the body curvature can help to provide an approximate fit, but for a final fit, you need to mark the main high points of local contact on the handle and spout ends, then sand them out. I used carbon paper then rubbed the 2 contact surfaces together to show the contact areas; just like the dentist does to finalise the profile of a filling!


1

A mechanical key between body and handle/spout is desirable and also helps positioning while gluing, for which I used 5 minute pva wood glue. The spalting on the wood provides plenty of interest, so there was no need for any decoration in this case.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B. **All-in-one, 2 axes** – The alternative to the more obvious gluing-on of separate handle and spout as used above, is to turn them integral with the body. This is a little more challenging and needs more planning. It is easiest to use the bandsaw to remove as much from the blank as possible before turning. **Photo 2** shows the blank mounted between centres ready to start turning on the first horizontal axis to form 2 sides of the body.


3

After shaping as much of the sides as possible, the piece was remounted on a vertical axis to turn some of the top and bottom; a spigot was turned on the base to enable hollowing to take place. A large crack formed in the piece, **photo 3,** and I decided it was not worth trying to fill it in and carry on. I thought the blank was reasonably dry before I started, but some drying out together with stress relief must have caused the crack to open up.


4

A while later I started again with a new ash blank. Once most of the outside had been turned, the teapot was mounted on the base spigot and hollowing carried out. Great care was needed to keep clear of the spinning protruding spout and handle. **Photo 4** shows this stage after some initial shaping of the handle and spout had been done with

several tools including Sabretooth burrs in a Foredom drill with flexible shaft. Further carving and sanding was then done to finalise the spout and handle, **photo 5**. Mounting the pot with a jam chuck through the opening enabled the foot spigot to be removed. A simple lid was then turned.

For decoration, I used a special wire brush to open up the ash grain, then an airbrush to colour the pot blue, **photo 6**. Gold gilt cream was then applied over the whole piece, **photo 7,** before using Danish oil to help remove all the surplus cream from the surface. After leaving it to dry, I sprayed it with several coats of clear satin acrylic to produce the end result**, photo 8.**

C. Multi-axis – This was inspired by an image I had seen of a teapot in maple burr by the American turner Art Liestman that was roughly square in section and had curved sides. I sketched out my own version and chose 3 sides convex in both directions and one side concave in both directions. It was then a question of deciding how to turn it on the 5 different axes and how to achieve the taper. For the convex sides, the centre for turning would need to be well outside the section, requiring a sacrificial piece on the centreline. The process has several names such as split turning, lost wood process or therming. My sycamore blank was 100mm square, so I used a sacrificial blank of the same size to turn on its own axis. A second similar blank was fixed to the opposite side to avoid a massive out of balance. I therefore started shaping 2 blanks at a time and ended up with 2 teapots from this process.

The arrangement is shown in **photo 9** with the 2 outer blanks fixed to the core piece with long (100mm) screws – the visible screws in the photo illustrate the position of the fixing screws underneath. A strong fixing is essential to avoid the blanks spinning off. The cut is only twice per revolution with the tool tip spending more time "cutting" air, so one needs to turn at a reasonable speed to try for a clean cut and minimise tear out. Once one side of the blanks has been shaped, the blanks are rotated 180 degrees and screwed back in place to shape the opposite side.

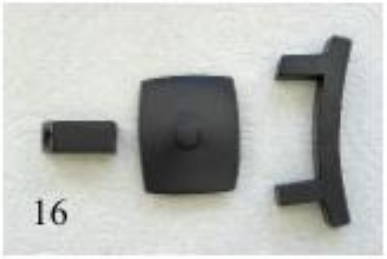
The double concave side could not be shaped using the same method. I used a strong plywood disc to hold the blank and because I wanted the sides tapered, I had to offset the piece, securing it with plenty of hot melt glue to battens screwed to the plywood. The 4th face was shaped in a similar manner, but offset in the opposite direction, **photo 10**. The top and bottom then had to be dealt with. The piece was fixed in a screw chuck with a spigot, so that the top could be finished and hollowing carried out.

Because of the square section and tapered skewed shape, the scope for hollowing inside was very limited. After drilling a hole with a Forstner bit, I was only able to enlarge the hole by hollowing a little on the piece with a wider top, because the wall thickness was critical at only one point. It was just as well these pots were only decorative, because the volume of the inside hole was nowhere enough even for a small cup of tea. Realistically a rectangular teapot could only be used if it were to be constructed of sheet material. The surplus square section of the base was cut off on the bandsaw and the base sanded to a concave profile. Being then supported only at the 4 corners of the base, they were carefully levelled up to ensure no rocking.

The sycamore had plain grain, so I decided to texture and colour them both, but differently. I also gave them different handles and spouts. On one they were made from a turned ring, on the other they were carved from a rectangular pen blank. Panel pins or wooden dowels were used to position them before gluing. Many trials of texturing and colouring were carried out on wood offcuts before settling on 2 versions. The first piece was textured on 2 sides using small spherical burrs in a micro motor handpiece, **photo 11.** Colouring was done first by brush applying 2 coats of cerise iridescent acrylic paint to all surfaces (not over

black paint as per normal usage). Over the 2 textured sides a darker purple colour was applied using the 'dry brush' technique to keep it off the dimples. The fleck finish on the other 2 sides, **photo 12**, was created using the simple toothbrush splatter technique. **Photo 13** shows the finished piece.

For the other piece, a Proxxon power carver, **photo 14**, was used to create a pattern of grooves on 2 opposite sides, be-fore brush painting with black acrylic. When dry the surface was sanded to remove all the black paint, except that in the grooves; then the whole piece was painted with several coats of green iridescent paint. A few very faint stems in darker green were airbrushed on the other 2 sides. On all sides some darker green paint was sponge applied, **photo 15**, followed by acrylic satin lacquer. The handle, spout and lid for the green tea-pot were sprayed with ebonising lac-quer, **photo 16**. For the finished piece see **photo 17**.



Comparing the 2 shapes, I think the greater taper on the purple teapot is a more pleasing shape, but the void inside was correspondingly even smaller. These 2 teapots did admittedly take a very long time to make, including extra time for trials of methods, texturing and colouring. Some turners are not too keen on texturing and colouring, but hopefully others will appreciate the unique end result.

E. Victorian shape with modern decoration – Turning this was straightforward, essentially a cross between a box and hollow form, **pho-to 18**. Over the whole pot I sprayed acrylic sanding sealer followed by 2 coats of ebonising lacquer. For decoration, I used the same technique that Gary Lowe used for his 'cosmic clouds' pieces, whereby iridescent colours are dabbed and dotted on to the piece and then spread around using a small jet of air, ideally from an air-brush without any paint in. I used the blue colour from the Sonja irides-cent paint range. The lid was painted with a brush, whilst he lathe was turning slowly. Handle and spout were cut out and carved to shape, before gluing in position. The completed teapot is shown in **photo 19.**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F. Teapots by others - There seems to have been more interest in teapot turning in the US than the UK, no doubt helped by the American Association of Woodturners (AAW), which held a themed exhibition of teapots by over 40 turners at their 2010 Symposium. Michael Gibson is probably the best known teapot turner. Born in the UK, he moved to the US nearly 40 years ago; his earlier teapots were decorated with exquisite pyrography by Cynthia Gibson**, photo 20**. The American Tania Radda has also produced an interesting series of colourful and whimsical teapots, such as **photo 21.**

Conclusion - For something different, you may wish to try making a teapot. Plenty of different shapes and forms of decoration can be tried. The multi axis rectangular teapots I made are not for the faint-hearted or beginners, but I was pleased with the end result. They needed a lot of planning and time; safety was also a particular issue, especially when mounted at maximum eccentricity of about 100mm.

Robin

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