

The Rose Engine was invented in Germany in the early 1500s¹. When Holbein was sent to paint a miniature portrait of Anne of Cleves in 1539, a Rose-turned case was made to house the picture. It's believed this was produced in Ausburg, or possibly Nuremburg, in Southern Bavaria. It is said that Henry VIII wasn't too keen on the portrait, but loved the rose pattern on the case. He instructed his unfortunate armourer to make something similar for his portrait which was to be sent to Anne. Both can be seen at the Victoria and Albert Museum.

For 75 years, British craftsmen turned some fine pieces, until fashions changed around 1625, and lidded boxes for miniatures were forgotten. In this country, Rose Turning was limited to decoration on finer domestic wares. [link to 17th and 18th century]

In Germany^{2,3}, many local rulers established turning workshops at their courts. They would employ master turners to "assist" them in their work, but there is reason to suppose some were skilled craftsmen in their own right. In the early 1600s, extraordinary pieces like the Coburg ivories were made⁴. It's arguable that no Rose Turner since then has attained the same level of skill and artistry.

Three classic books about complex turning were published in France in the 18th century⁵, which makes it seem that the centre of progress had moved to Paris. In fact, Rose turning continued to be a popular hobby for royalty and aristocrats all over northern Europe.

The end for Rose Turning came when Holtzapffel came to London and started making lathes. He invented the craft of Ornamental Turning, which used relatively cheap equipment to shape and decorate the work. OT became a hobby cheap enough for a mere gentleman. Rose Engines were still used for engine turned patterns on metal, but very few people used them for shaping work. Surprisingly few general-purpose Rose Engines were made in the 19th century. The book which Holtzapffel intended to write on Rose Turning never materialised.

When the SOT was formed in 1948, there were no active Rose Turners. Norman Tweddle had a fine Holtz machine, and knew how to use it. He was persuaded to write "The Rose Engine Lathe", but his real interest was geometric chucks.

Since then, old machines have found new homes with people who actually use them, and many new machines have been built. The Society even has a member who's rediscovering the techniques of working with hand tools on a 17th century machine. He's also built one of the finest Rose Engines ever made, which allows him to work in 18th century style.[link to 17th and 18th cent]

The 21st century has brought the MDF Rose Engine, a cheap, simple machine which makes Rose Turning accessible to most people. We've also seen Fred Armbruster's amazing batch of 2 dozen machines, based on the old Holtz design but incorporating many modern improvements. Other people have been experimenting with computer controlled equipment. We'll be seeing a lot more Rose Turning in the future.

References:

¹ A survey of Tudor and Jacobean Rose Turning, John Ferguson and Roger Davies, SOT Bulletin 83.

² Der Drechselnde Souveran (Sovereigns as Turners), Klaus Maurice, Zurich 1985.

³ Gedrehte Kostbarkeiten (Turned Treasuries), Georg Laue and Klaus Maurice.

⁴ Ivory Towers, Kirsten Aschengreen Piacenti and Friedrich Schiller, In FMR magazine, issue 41.

⁵ The three French books on turning are generally referred to as Plumier, Diderot, and Bergeron. Originals are obviously rare, expensive and incomprehensible. The SOT has nearly finished a translation of Bergeron, vol. 2. There was a reprint of the picture section of Diderot, but it's out of print. Ferraglio's translation of Plumier is as scarce as the original.

Full titles and publishing details are in the Bibliography of the Art of Turning and Lathe and

The origins of turning.

Most of the early civilisations produced vessels in soft stones, which appear to be turned. In fact, the process involved boring and the use of abrasives, and it has little to do with turning. The “4000BC turned box”, shown in a turning magazine article a couple of years ago, was produced around 400BC. The earliest Greek soft stone pieces are Cycladic, dated 2700-2200 BC. Close examination of decorative beads around these pieces shows an irregularity of line that a lathe wouldn't produce.

The earliest examples of turning which have been found look like the work of jewellers. A beautifully executed jet button, found in Yorkshire, was dated at 2000BC. Sadly, it didn't survive conservation, and I don't think there was time for a specialist to examine it for informative toolmarks. It's easy to argue that turning developed from the bow drill, used to pierce beads. Finds in Scandinavia show the bow drill was known as early as Mesolithic times.

Circular shapes were very attractive to people in the bronze age and iron age. Circular wooden bowls have been found, which were laboriously carved out by hand. If the wood's deteriorated too much to see tool marks, it can be difficult to recognise a piece turned on a lathe. Waste wood from the turning process may be easier to recognise. “Wasters” from the bottom of turned bowls are the earliest known evidence of wood turning in Britain. These finds at Oakbank Crannog may be as old as 700 BC.

It seems fair to assume that the development of the wheel was connected to the origins of turning. The technological advances involved in developing the spoked wheel shows that wheelwrights were capable craftsmen, able to devise a design that made best use of materials and shaping methods to produce an effective result. They must have realised that a rotary motion would make it easy to shape components like hubs. In the Hermitage Museum, there is a chariot, dated to the 4th or 5th century BC. It's wheels have curved spokes to produce a slightly dished shape. It looks as if they are pollarded timber grown into shape. It has a low rail around the platform, supported by turned uprights with decorative beads, and the hubs of the wheels look turned.

Before the days of iron tyres to hold a spoked wheel together, it's believed that components were carefully joined and glued. In a dry climate, they could be bound with rawhide. They weren't a lot of use in a wet country like Britain, where the “tripartite” wheel was used. It was a simple looking but technologically advanced design: three pieces of board were held together with dovetailed strips, held by wooden pegs. Part of one, found at Flag Fen, dates from about 12-1300 BC. If you have a vehicle with wheels you need somewhere to drive it. This find had a couple of gravel pebbles pressed into it's edge, which show it was part of a real wheel, even if it's not proof of surfaced roads.

It's clear that there were lathes before the iron age, but the improved iron tools must have encouraged heavier uses of the lathe, which would have needed improved drive systems. The first jewellers lathes were probably bow driven. It's possible early woodturning lathes were driven by a strap passing around the work, and pulled backwards and forwards by the turner's assistant. It seems probable that the pole lathe was an iron age invention. The improved lathe would have been able to produce domestic wares in commercial quantities.

Glastonbury lake village was occupied between 250 and 50 BC. Four turned bowls were found, one with typical La Tene decoration. The outsides of these bowls were all finely finished, but the insides were less important to the maker(s). Three “showed distinctly the parallel striae made by the tool”.

The description of the last was even blunter: “The inside has been somewhat roughly scooped out, and the toolmarks are clearly seen”. This seems very curious to a modern woodturner.

Bracelets carved and turned from shale were also found on the site. The centre of the industry was Kimmeridge. It became an important local industry in Roman times. Enough waste was discovered from workshop sites to show how the work was held in the lathe. Flint tools were used. Recent experiments have shown that the sharp edge might only last a dozen revolutions of the work, but iron tools were blunted even quicker, and took much longer to resharpen. It only took a moment to retouch the edge on the flint.

Early wooden artefacts have generally survived because they were in waterlogged soil. Land drainage schemes, supported by government grants, have lowered water tables and destroyed wooden artefacts at many sites, so we may never get a clearer picture of early turning in Britain.

One day, I'll get round to writing this in more detail, giving references. For now, I'll just mention Robin Wood's *The Wooden Bowl*, a beautifully produced, well researched book. I've only got one minor criticism of material in the book: Wood repeats Earwood's acceptance that 2 bowls found at Wookey Hole are Romano British. This is not justifiable. The site was a cave entrance with material found in debris amongst boulders, subject to regular disturbance from visitors and residents. The bowls were protected by a deposit of goat dung which is now thought to be iron age. This sounds like a very minor point, but these 2 bowls represent a large proportion of the turned bowls known from the period in Britain.