Dublin Chapter Newsletter

Irish Woodturners Guild

January 2023

Please check both your email and the Chapter website (http://www.dublinwoodturners.com) regularly for updates.

Our recently departed esteemed colleagues Michael McNamara and Seamus Carter, may they rest in peace.

Inside this issue:

Our colleagues, Michael McNamara and Seamus Carter recently passed away. They were members of our chapter for many years. Michael won many competitions starting in 2005 and moved quiclky up to advanced. Seamus gave many demos, his speciality was barley twist turning, he known to play a few bars of 'lets twist again'.
They will be missed by all who were lucky to have known them,.

Saturdays demo by Brendan Phelan and John Doran
(part 2 on page 11.)

This year our traditional demonstration did not happen as Joe O'Neill's wife of 52 years passed away during the week. So the December format had to be changed. His wife's mass and cremation took place on Friday. John and Brendan decided to do the demo on Saturday.
Our Saturday meeting started with a minute's silence in respect of Joe's wife. To our surprise at the end of the minute's silence Joe who was present thanked all those who in any way were present for him during his grief and loss. Ar deis De go raibh a h anam dilis.
John Doran did the first demo. He dressed for the demonstration. As he he did so he indicated to the beginners present that each of the items , the coat, helmet and glasses, were items that provided protection when turning and not an optional addition to one's work

December competition photos

1st advanced Sean Ryan

2nd advanced John Duff

3rd advanced Tommy Hartnett

4th advanced Brendan

5th advanced
Paddy Finn

6th advanced
Tony Hartney

7th advanced Frank Gallagher

8th advanced
Vincent Whelan

1st beginners
Michael Stevens

2nd beginners Claire Godkin

1st experienced Charlie Byrne

2nd experienced Ray Ivers

1st artistic Diarmuid Dooley

4th artistic
Michael Jordan

2nd artistic Michael Stephens

3rd artistic Frank Gallagher

A twisted box
by Mike Sims

At the August meeting of the South Downs Woodturners, I entered a small box in the competition (See left). Some wondered if the “box with a twist” was made on a lathe so, this article describes how it was done.

This is not a detailed description of box-making. It assumes that you have made some, so some basics are glossed over. My box is small with a detailed finial on the lid so, if you want to duplicate it, choose a tight and straight-grained wood without knots or cracks. Start with a blank that is 16 cm long by 5.5 cm square.

Round the blank between centres to about 5 cm diameter and put a spigot on the tailstock end to suit your chuck. Next mark a point where a parting cut will be made to separate the lid from the base. I decided 10 cm for the bottom and 6 cm for the lid, with the lid portion at the end with the spigot. Make the parting cut and saw through the last bit to avoid tear-out.

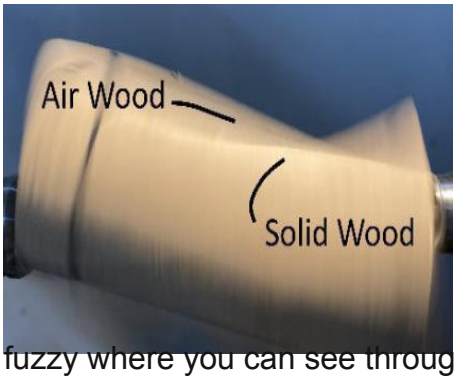
With this design, I prefer to make the base first followed by the lid. This is because the depth of the twisted coves that form the outside of the base dictate the size of the hole that you can make to form the inside of the base. This hole in the base, then dictates the fit of the lid into the base. Additionally, the lid cannot be jam-chucked into the base to be finished later, so it must be made independently.

To make the base, start by placing the 10cm blank between centres. This step establishes a centre point on the end that will be at the top and you will have to judge where the new centre point for the tailstock live centre will be. Tighten down when you are happy with the centring. If you cannot get the blank to rotate true, then turn it to round with the lightest of cuts.

At this point the blank can be taken off the lathe and the off-centre points marked on each end. We are going to turn on three different centres and we must mark them at 120 degrees apart. Start by marking a 3.5 cm diameter circle on one end. (see pic above right). When marking I tend to use a fine point sharpie rather than a pencil. The markings are clearer. Now mark three centre points on the circle that are 120 degrees apart. Make a notation against each centre point, marking them as #1, #2 and #3. Now, extend a line from the true centre through the #1 centre point and on to the circumference of the cylinder. Extend this line straight down the length of the cylinder (See above) and over the other end of the blank and into the true centre point. At 1.75 cm back along this line, mark off-centre point #1. Now draw a 3.5 cm circle on the end and mark the other two off-centre points - #2 and #3 - on that circle, as before. Whether you go clockwise or anti-clockwise when marking points #1, #2 and #3 is not important. It is important that, if your numbering is in a clockwise direction, then the numbering on the other end must be anti-clockwise. Just to review after all this marking: we now have three points 120 degrees apart on the same circle, where #1 has the same relative position on each end, as does #2 and #3. It can also be useful to mark the numbers (1, 2 & 3) on the outside of the cylinder at each end. When you are happy with this then punch the three off-centre points on each end.

We can now turn the three twisted faces. Before returning the blank to the lathe, decide which

end will be the bottom of the base taking into consideration the grain alignment relative to the lid blank. Firstly, mount the blank between true centres and make a mark around the cylinder at 1.5 cm from the bottom. We will make a spigot on this end after the twists have been made. This line also marks the parting off point when the base is being finished later. Now you can mount the piece between centres where the drive centre is on #1 and the live centre is on #3. Rotate the piece by hand to ensure that nothing is catching and then, standing out of the "firing line" and setting the rpm low, turn the lathe on. Increase the speed to whatever you are comfortable with. It is worth mentioning here that the gouge will only be in contact with the wood for part of each revolution, so you might want to increase your speed somewhat to compensate for this. In my case I would turn at around 1500 rpm.

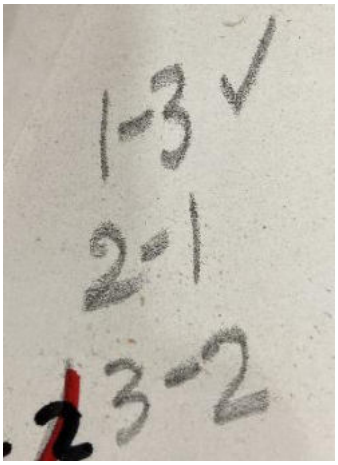


While on this topic, a few words about terminology, technique and safety.

1..When turning off-centre there is an area of the shape that is delineated by an edge that is distinct or solid. This is termed, the solid wood. Additionally, there is an area that is less distinct or fuzzy where you can see through it. This is termed air wood, sometimes called ghost wood. Both solid and air wood will be seen on a piece that is being turned off-centre (pic on left).

2... Sharp tools are essential. Blunt tools will promote mistakes.
3.. Take light cuts. As the gouge is only in contact for part of each revolution, excessive pressure will advance the tool too aggressively during the part of the revolution when the tool is not in contact.
4... Use the heel of the gouge to feel for contact before committing to a cut.
5... Look at the profile of the piece at the top, be it air or solid wood, in order to assess the shape that you are making. Do not look at the point of the tool to assess shape.
6... Periodically stop the lathe and check the mounting of a blank to ensure that it is still safe.
7... Always wear full face protection. Safety glasses are not enough.

Back to the twisted faces. We are going to shape a long shallow cove that will start at the parting off mark and end at the top of the base. As with any cove, remove material in both directions, cutting downhill, starting in the middle and working outwards. When taking cuts, be aware of items 2 – 6 above. Make the cove 8 – 10 mm deep and do not go too deep as you will be hollowing out the base later and you need to make it a decent size inside. For cutting the twist I use a 12 mm spindle gouge because beginning an off-centre cut can be quite bumpy, and the heavier tool helps in this respect. Make your cuts as smooth as possible as they will have to be sanded by hand, although a large negative rake scraper can be used to take out stubborn tool marks. You should now have two twisted edges on this face that curl around the cylinder. Now you can sand this face by hand, working up through the grits. Wrapping sandpaper around a dowel is helpful here. We will apply final finish later, but if you want to see how the finish might turn out, then



applying sanding sealer will reveal any unwanted blemishes.

When you are happy with the sanded finish, remount the piece between centres #2 and #1 and repeat the previous steps. If you are not happy with the finish, go back and take another cut with the gouge. You should now have a crisp spiral edge that smoothly delineates this face from the previous one (pic left). Now, repeat this process again with the blank mounted between centres #3 and # 2. At this point you have the three twisted faces completed. I should mention here that this sequence of mounting centre points (1 to 3, 2 to 1, 3 to 2) produces a twist that goes to the left, as you look at it on end. An alternative sequence that produces a face twisting to the right is 1 to 2, 2 to 3, 3 to 1. Whichever you choose, I suggest that you write the sequence on paper and tick-off your progress as you.

Return the piece between the original (true) centres and put a tenon/spigot that will suit your chuck on the end that will be the bottom. Now chuck the piece on the new spigot, bringing up a live centre in the tailstock to ensure correct centring before tightening the chuck. Remove the tailstock and proceed to hollow the box. You can do this in several ways. I prefer to drill out the wood using a Fostner bit and then finish the inside with a gouge. A 25 mm bit should suffice but check the wall thickness that will result before drilling. Also, do not go too deep. This box is slender, so I like to leave 2 cm of wood in the bottom to give it more stability. Remember also that if you use a Forstner bit, that you will have to clean up the bottom of the hollow to remove the depression left by the drill point. This can be done with a box scraper.

When you are happy with the hollowing you need to square off the end that will be the top of the base. I also prefer to round off the three points at the top of the twists, as the sharp points are susceptible to damage. Now you can proceed to cut a recess around the rim of the hollowed base which will accommodate the lid. I make the recess about 3 cm diameter and about 4 mm deep. I use a small oval skew for this. Firstly, with the skew flat on the toolrest and with the heel nearest the centre, I cut into the end grain with the tip of the skew. Make the outsides of the recess as parallel to the centre as possible – line up the skew with the lathe bed to ensure this. When you are 4 mm deep, move the skew handle towards the centre line of the lathe, removing material to make a 90-degree recess bottom (F).

The box bottom can now be sanded inside and finished applied inside and out. Then, you can part the bottom off, just above the spigot. If you want a more professional finish to the bottom or some detail, you could make a jam-chuck for the hollow to hold the base, but that is your choice.To make the lid, mount the lid blank in your chuck and square up the end. Then reduce the piece to a cylinder whose diameter will fit into the recess in the top of the base. The tightness of this fit is your choice. The finial on my lid is delicate, so I chose a looser fit. Then you must make a shoulder on the bottom of the lid that fits into the hollowed hole of the base. The depth of the shoulder and the uppermost lid are both 4 mm. If you want to put some detailed grooves or some texturing on the underside of the lid, now is the time (pic left). At this point you can begin to shape the domed top of the lid and make a post that will be the finial. Remove as much material as possible while you have the piece chucked and well supported. Give the domed lid a final smooth cut and sand and finish the dome

and the underside of the lid. The lid can now be removed from the chuck.

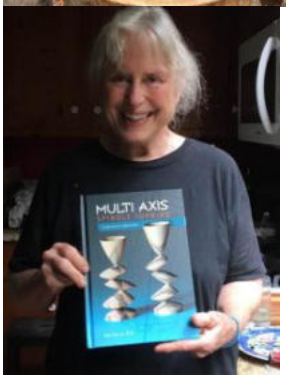
Traditionally, finishing a lid is done by jamming it into the base. We cannot do this because the base cannot be remounted on the lathe. What I do here is to make a collar from a piece of scrap wood that fits around the shoulder that was made on the underside of the lid. This collar can then be gripped in your chuck without marking the wood. If you have a set of jaws that could grip the shoulder without marking the wood, then use them instead of making a collar. To make the collar, mount the scrap wood in a chuck; square the end, and cut (or bore, or drill) a hole that is the same diameter as the shoulder (say, 25mm). The hole should be approximately 10 mm deep. Reduce the outside to about 35 mm diameter, to give a wall thickness of 5 mm. Then make a mark on the outside at 5 mm from the end. This is a line that indicates where the collar should be parted off. Parting it off should give you a collar that is 35 mm od, 25 mm id, and 5 mm deep. It should fit over the shoulder on the lid underside. Then take a carpenter's flat chisel and remove about 5 mm from the collar with two cuts – this gap allows for compression in the chuck jaws (H). The collar should now hold the lid in your chuck, centred with a live centre in the tailstock, so that you can shape and finish the finial (pic right).

And there you have it. A twisted box with a finial lid (J). You can vary this box in several ways: you could turn on four axes, rather than three; you could dispense with the finial and the recessed fit of the lid and have a more integrated lid that continues the twists; you could experiment with moving the off-centre points different amounts and see what effect that has on the twist; or all of these! Whatever you choose - good luck with it.

a few notes on Barbara Dill, taken from her website https://www.barbaradill.com/

She was always fascinated with multi axis turning and in 2006 her focus turned to multi axis turning. Tired of running into dead ends with her candle holders, she decided to see if there was a way to sort out the confusion of this aspect of turning. If an obsession is to wake up with a new "what if" most mornings, then she was obsessed.

Barbara enjoys teaching and sharing her knowledge. She has made an instructional DVD which is on her you tube channel, has recently compiled a book loaded with drawings, photos, and information and has published articles in the American Woodturner



She created a book about multi axis spindle turning that was published in the summer of 2018 and is available in bookstores and on line (Amazon).

Principles of design
by John O'Neill

In our November newsletter we had an article on the elements of design.
They are line, texture, space , shape/form, value and colour. These elements are similar to the list of ingredients in a recipe. The next stage in a recipe is mixing, preparing and baking something which looks good, is tasty and edible. In the design world the equivalent to this process are the 'principles of design' There is no set list of these principles, some texts have 7, 8, 9,,, 13 principles, it really depends on the artform involved.

Generally we have 7 core principles, they are emphasis, balance & alignment, contrast, repetition, proportion, movement and consistency
Top right is the Eileen Gray chair, a world reknowned Irish exhibition of her work currently on in the the national museum and well worth a visit. On the left is a pic of nature producing its own design with curved tree trunks.

Emphasis
Emphasis is what the designer uses to draw the eye of the viewer to specific elements and characteristics of the piece.We use emphasis to create visual interest. A dramatic change in line in the shape of a turning, the placement of the “beauty ring” in a segmented turning, or the placement of the largest diameter in a hollow form. On the left is an off centre bowl by American turner Denis Tapley, off centre bowl emphasised by the inlaid grooves.

Balance and Alignment
Woodturners are lucky as turning a piece on a revolving lathe will nearly always produce a balanced result, this is called symmetrical balance. When the turner goes off centre by introducing an offset to the work then this interrupts the natural balance, this is asymmetrical balance. A pefectly balanced piece can appear uninteresting but an offset can enlighten a piece, the wrong offset can destroy it! Balance in a hollow form is both a horizontal and vertical property, a form or bowl can be ruined by a misplaced bulge. on the right is a piece by Pat Walsh from our 2015 competition, bowl with the shape built around the natural feature.

Contrast
Contrast occurs when two elements are different, a thin line versus a thick line, dark colour beside a bright colour A natural source of contrast is dark grain alongside light grain. Texturing can be used to provide contast and add to the appeal of a piece. Contrast is attractive to the eye, increases the interest level of a piece but too much contrast can confuse the audience. On left is a piece by Pat Walsh (2016) indicating use of contrast.

Repetition

Repetition is the reusing of the same or similar elements throughout the design. This is not to be confused with a pattern. It is used to create a sense of unity and consistency in a piece. Elements in a piece may be partially reused, it can be regular, even vs uneven, regular vs irregular. There is another repetion in woodturning, i.e. mastery of a technique by repetition, not a design element but an upskilling exercise.

On the right is a piece by Martin Boyle from 2016, segmented piece with repetition. Irregular repetition can also be achieved with a burr, scoring the wood without allowing a pattern to develop.

Proportion

This one is a key subject for woodturners and is key to producing a balanced piece. Can be also referred to as scale and includes the relative comparisons, positions and size of features within the piece. There are many rules employed which govern proportion such as,

1...Avoid placing any design feature or shape change (e.g., bead, ridge, edge of a lid, etc.) close to the halfway point vertically up a piece. This is also true for the location of the center of gravity or widest point on the piece – a 1/3 to 2/3 proportion usually looks good, and most often (not always!), above centre is usually best.

2... for bowls and platters the base should be 1/3 the diameter of the top

3...for closed forms the size of the top opening should be 1/3 the diameter of the piece.

A past master, Ray Key used a rule of 5ths, e.g. base of bowl should be 2/5ths diameter of the top, one of his masterpieces on above left.

Proportion is key to good woodturning production. A piece should be in harmony with itself, i.e. it should look good.

Movement

Movement means guiding the viewers eyes to a predetermined path in a piece. Just above (left) is a piece by Jonanthan Wigham with movement by utilisation of the woodgrain line. On the right is a piece by Roger Bennett with use of movement, line and rhythm, well photographed also.

There are many techniques employed to provide movement.

..Line, lines can be used to breakup a bland area and can themselves provide movement as in curved lines on a form as in Roger Bennetts work. Wood comes with built in lines, woodgrain!

..Rhythm, when a feature is repeated it is called a rhythm. When it occurs in a directon and it encourages the eye to follow, resulting in movement. Spiralling tools can be used to provide this effect on wood as well as carving.
Woodgrain need to be exploited to provide line & rhythm.
On right is a piece by David Sweeney from 2016 showing use of line and grain.
Below are two Emmet Kane pieces, hollow form and crock

of gold, indicating consistency in design and presentation.

Consistency

Consistency collects together all the other principles and decides how they are used.

The aim should be to have consistency of the following

- Of style
- Of embellishment/treatment
- Of finish
- Of proportion

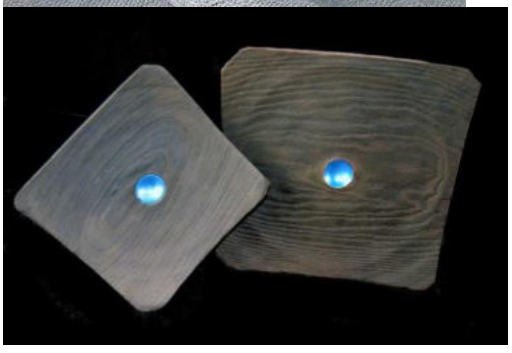
Less is definitely more, a piece with overuse of lines, grooves and other added embellishments will look chaotic. A piece with one dominant feature and possible a minor one will look purposeful and not confuse the audience. Embellishments in design of the piece should not conflict with the natural features of the wood. Ray Key used to say 'keep it simple, let the wood speak for itself and if in doubt leave it out.'

On the right are some turned stone vessels from Saqqara, Egypt, about 5,000 years old, showing all the elements of good design producing appealing pieces, ech with one added feature.

This article covers 0.001% of the topic on design principles but hopefully it gives a good overview of the subject. Put 'principles of design' into a web search and read on!

Images of some design principles in action .

left, burl oak platter by Andrew Hall.



Bottom left, square bowls by Emmet Kane.

On right, hollow form by Tony Farrell (Cork).

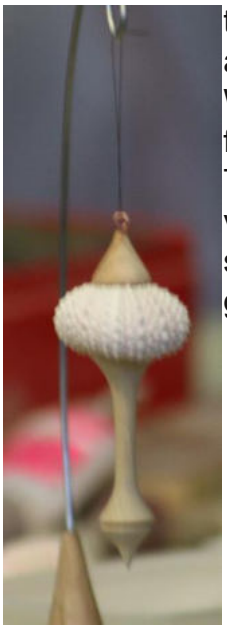
(Sat demo contd) He placed a piece of red deal 45 / 45 / 175mm in the chuck and brought up the tail stock to ensure that the piece remained in position when turning. He then rounded the wood using a roughing gouge and skew. Holding both tools firmly to his side firstly he roughed out the cylinder with the gouge and smoothed the timber with the skew. During the turning he referred to rules that should be observed to ensure

safety at all times. Having rounded his timber he indicated that a Christmas tree, a spinning top and a toadstool would soon appear. He first shaped the tree ,base the in a barrel that tapered to a smaller base. On the base he burned two black rings with a tapered piece of timber as the wood was turning. He neatly layered the tree in sections with the skew chisel. This lesson had first been shown to children so when he released the tree, it was up to them to paint it as they wished. He then turned the spinning top and toadstool. He coloured the spinning top. John engaged his listeners but allowed room for everyone to use their imagination in how they would finish the items.

Brendan demonstrated the turning of a Christmas tree decoration.

He used a cherry blank and a sea urchin shell combining both to form a beautiful item for hanging on a Christmas tree. The sea urchin shell complicates the turning. It has an uneven surface and the entrance hole and exit hole are of different diameters.The Christmas decoration is
made up of combining two pieces together, a sphere or a sea urchin shell and a timber blank

from which the icicle and finial top are turned.If a sphere separates the finial and the icicle then spigots can be turned at the ends of the finial and the icicle to slot into pre drilled holes at the top and bottom of the sphere. Brendan solved the problem by turning a longer spigot at the top of the icicle which goes through the base hole to the inner surface at the top of the sea urchin shell. The finial has only to cover the top of the shell and be joined to the long spigot of the icicle inside the shell. There are a few ways of joining the finial and the spigot. I will leave that as a challenge for you to solve.



When turning the icicle and finial Brendan turned a small section of the icicle and finial at a time.
The surface being turned was joined to a solid piece of timber that reduced the vibrations of the section being turned. That procedure was to avoid shattering the section being turned. All sections were then carefully sanded and finishes applied gently. Both demonstrators gave us things to think about and proper procedures to follow when turning.

Thanks to both turners for the preparations done at such short notice.

Competition Table

Beginners	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Totals
Michael Stevens	15												15
Claire Godkin	13												13
Experienced													
Charlie Byrne	15												15
Ray Ivers	13												13
Advanced													
Sean Ryan	15												15
John Duff	13												13
Tommy Hartnett	11												11
Brendan Phelan	9												9
Paddy Finn	7												7
Tony Hartney	6												6
Frank Gallagher	5												5
Vincent Whelan	5												5
Artistic													
Diarmuid Dooley	15												15
Michael Stevens	13												13
Frank Gallagher	11												11
Michael Jordan	9												9

Competition Pieces for 2023
January: Set of napkin rings (2 for Beginners: 6 for Experienced and Advanced)
February: Salad bowl - with servers for Experienced and Advanced
March: Hollow form
April: Gavel and base
May: Open
June: Flower pot stand
July: Picture or mirror frame
August: Salt and pepper set
September: Goblet - with captive rings for Experienced and Advanced
October: Egg cup with egg

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