

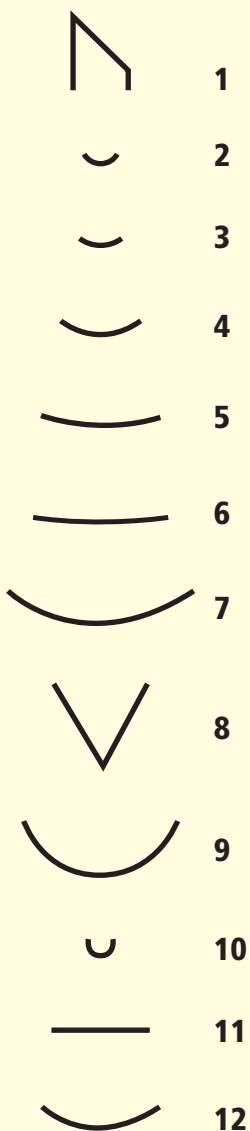
Woodcarving by Numbers

with Mike Davies

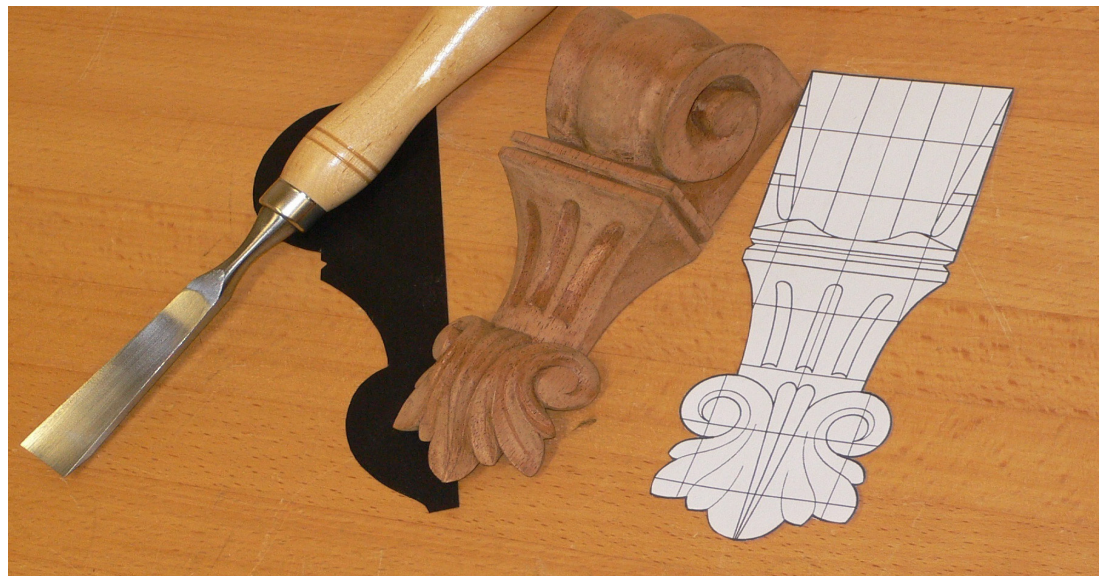
Corbels

Woodcarving by Numbers is a simple to follow programme, that guides woodworkers of all skill levels to become competent woodcarvers. Available as a tool and DVD package, simply match your carving tools to the numbered profile chart, and follow the step by step guidance through each project. Watch and learn the Significant Six Carving techniques in the 'Woodcarving Foundation Skills' DVD and work through the various projects, graded in difficulty, designed to put your skills to the test. The ultimate goal is to create designs of your own to add a unique point of difference to your woodworking projects.

Sweep Profile Reference Chart



Please refer to the Significant Six Techniques tutorial or watch the Foundation Skills DVD for safety and guidance with your techniques.



Pic 1

The corbel is a much used form of applied decoration, most commonly found on carcass furnishing. The design varies tremendously according to the functional requirement and the tastes of the different periods in history. You can often see them supporting the protruding mouldings and sills of impressive historic buildings. On furniture, the function is mostly ornamental and examples of some interesting variations can be found by typing 'Carved Corbel' into your Internet search engine.

1. To begin this project, first photocopy or redraw the illustration in **Fig 1** to scale and use the drawings to produce stencils. **Pic 2.**

2. The timber dimensions for each corbel will need to measure 150 x 50 x 50mm. I have chosen mahogany for this project, but oak, pine, beech, rosewood and walnut are a small selection of the many possibilities that could be chosen.

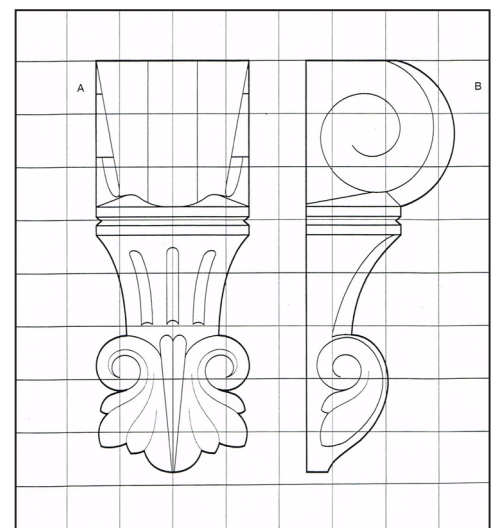


Fig 1

3. Ensure the block of timber is prepared so that it is square and clean. Now select the best face side and face edge, and mark them with the appropriate symbols. Then placed the stencil formed by **Fig 1 A** onto the 'face-side', mark around the edge and cut out the profile as accurately as possible. **Pic 3**. If you have access to a bandsaw, you will find this the quickest and easiest method of cutting the blank.

4. After cutting the first profile of the corbel, place the stencil formed by Fig 1 B onto the 'face-edge'. Draw around the stencil and carefully cut the shape. **Pic 4 & Pic 5**.

5. Note in **Pic 6** how the design is broken down into 4 divisions; A,B,C &D. These divisions will be used to reference the areas of the carving as we work on each component.

6. Mark two central parallel lines to divide area A into 3 portions. The middle portion should measure 20mm with the 2 outside areas measuring 15mm each in width. Then divide the outer portions with diagonal lines that fall from the very top of the blanks outer edge to the middle of the division where area A meets B. **Pic 7**.

Next form the elongated V line required on section D. At its widest point the V should be exactly 12 mm, narrowing to meet at the very bottom of the design. This V will form the central vein for the acanthus leaf design.

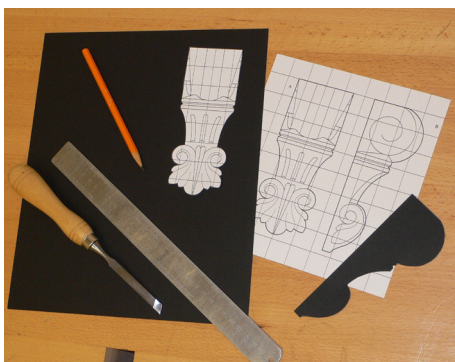
7. Also mark the side scroll on both sides of section. It is helpful to make a stencil for this process. **Pic 8**.

8. Now it's time to secure your work for carving. A carving clamp is very helpful for this type of work. With tool ref. # 4,5 & 12, set in the profile of the scroll on both sides of section A, making sure that the cuts are made at 90 degrees to the timbers surface. This ensures that the scroll remains the same dimension at the bottom of the cut. **Pic 9**.

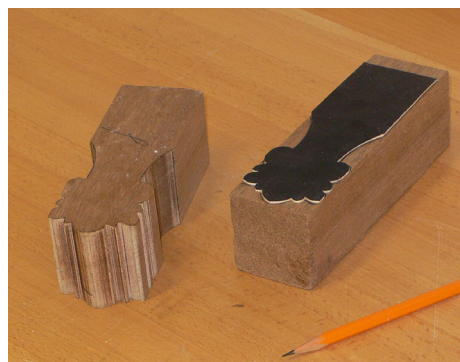
9. Then with tool ref# 6, carve the outer diagonal lines of section A down to the 'set in' cuts of the side scrolls. **Pic 10**.

Notice the diagonal cut does not continue to the rear of the design, but tapers out to the full width of the corbel.

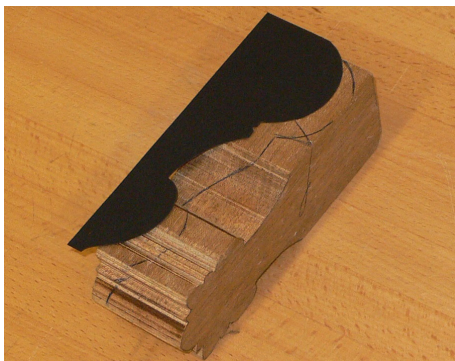
10. Next use tool ref # 8 to form to deep V shaped grooves to define the central vein of the acanthus leaf on section D. Hold the carving tool at a slide angle, providing the vein with vertical side walls. Try the 'tapping technique' using a mallet. **Pic 11**.



Pic 2



Pic 3



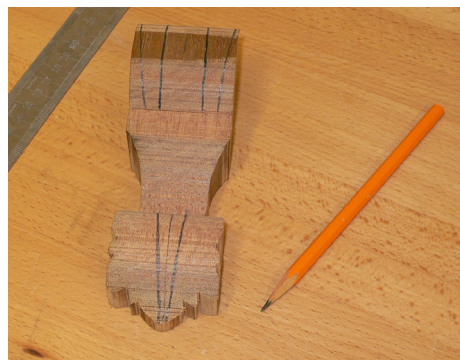
Pic 4



Pic 5



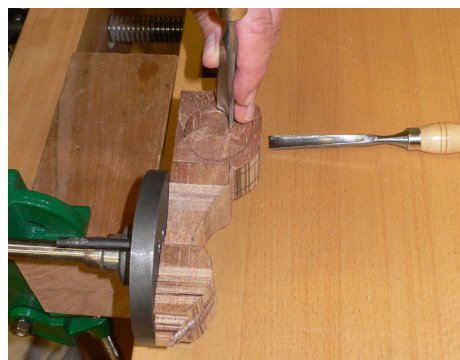
Pic 6



Pic 7



Pic 8



Pic 9



Pic 10



Pic 11

11. Define the central portion of section A using tool ref # 8, ensuring that the side walls are vertical to the surface of the wood. Then with tool ref # 11, reduce the two outer portions of area A to follow the profile of the side scroll. **Pic 12.**

The next stage is to shape section D as shown. Remove most of the timber on either side of the central vein with tool ref # 6 and round over the surface with tool ref # 5. This will then allow you to mark the scrolls on either side. **Pic 13**

12. Set in the scrolls on section D with tool ref #s 3 & 4 and define their shape by slicing down the cut lines with tool ref # 4 & 12. Now form a channel with tool ref# 3 & 4 to shape the two large side leaves of section D. This should form two high ridge lines that flow in the line of the scroll. **Pic 14.**

13. Round over the central vein of section D using tool ref # 4. **Pic 15**

14. Now let's create the high central ridge of section A by carving two deep troughs with tool ref# 10 on either side of the central division. **Pic 16.**

15. Mark the side scrolls of section A with a spiralling line. **Pic 17,** and begin to develop the scrolls with tool ref # 4 & 12 by setting in the profile lower. Then slice down at an angle from the spiralling line towards the deepened perimeter to create a ridge line defining each scroll further **Pic 18.** Here you can also see how the lower part of section C has been shaped with carving tool ref # 11.

16. Next, mark the three flutes on section C and use tool ref # 2 to create the concave details. Carve carefully between your pencil lines to establish the depth of the flutes. Note how the flutes are finished at their base. This can also be completed using tool ref # 2. **Pic 19.**



Pic 12



Pic 13



Pic 14



Pic 15



Pic 16



Pic 17



Pic 18



Pic 19

17. Now, you can create the V shaped channel between along the top and sides of section B. First mark the channel in pencil and complete the cut using tool ref # 8. If you encounter awkward grain, you should use tool ref# 11 to cut the channel from each side using 2 cuts at 45 degrees. **Pic 20.**

18. Use tool ref #2 to form the smaller channels on the acanthus leaves on section D. **Pic 21.**

19. Now decorate the leaves further, adding individual veins by making very shallow cuts down the centre of each leaf with tool ref # 8. Draw the lines in pencil first to provide a guide. **Pic 22.**

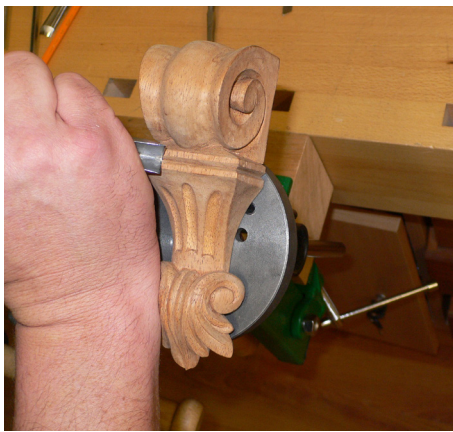
20. With tool Ref # 8 carve a small V shaped channel down the middle of the central vein in section D and round over each side using tool ref # 1. **Pic 23.**

21. Finally, clean up the outside edges of the leaves. To complete the corbel use the technique of 'backing off'.

Backing off is a process commonly used on 3 dimensional carvings to remove surplus timber from the rear. The general idea is to remove the bulk of the timber from the edges of the carving where it can be seen, but to leave enough at the rear of the carving to retain its strength.

Gently place the finished carving on a soft cushion and with Tool ref #1 remove small slithers of timber from the reverse side of the carving around the visible edges. Remember to always cut 'away' from the hand that is holding the carving and only use a controlled pressure. If you need to apply too much pressure to remove the timber, then your carving tool may require sharpening or you are trying to remove excessive amounts of timber at one time. The danger of applying too much pressure is that you could damage the face of the carving, or you could slip with disastrous results.

In **pic 24**, you will see how only the very tips of the carving have been reduced to a fine point and the bulk of the remaining timber is out of sight.



Pic 20



Pic 21



Pic 22



Pic 23



Pic 24

About the Author

Mike Davies is an accomplished craftsman, who has completed projects for royalty, national trusts and private collectors alike. He has surveyed and restored works by many of the great designers and carvers from the past.

As a qualified teacher, he originally developed his 'Woodcarving by Numbers' educational system in 1994. It was created to help woodworkers of all skill levels to master the art of woodcarving.

Since then, his system has been published in magazines and books. It has been televised and used to teach students in schools and colleges around the world.

The information contained within this document, forms part of a DVD and tool package, which has been developed in cooperation with many of the world's leading carving tool manufacturers.

Important Information and Disclaimers:

learnabout.TV and Mike Davies assume no responsibility or liability for injuries, accidents or damages resulting from the information conveyed herewith. The information or instructions are provided as general guidelines only and demonstrate woodworking activities performed by skilled and experienced craftspeople. These techniques can be dangerous. If you practice them, proceed carefully and at your own risk. The Sweep Profile Reference Chart is provided as a simple referencing system for this series of Woodcarving by Numbers tutorials. It does not refer to references used by the London Pattern Guide, Sheffield List or Continental System.

Please note that due to the printing process there may be variations between the sweep chart and actual tool profiles.

