



GROWTH PATTERNS

by Cheryl Malone

After studying fine art in South Africa and the U.K. during the 1980s, I found my medium in porcelain at the Camden Arts Centre, in London, England in 1988. I have been working in Cape Town, South Africa, since 1996.

Along with the exquisite diversity of the natural environment in which I live, the analogies found between the coil-forming process and the growth patterns of plants continues to be my most important source of inspiration. Although I did not initially follow Fibonacci rhythms and phyllotaxis and logarithmic spirals, they all inform my work and the appreciation of the end result.

Deliberate Forming

The working process begins by continuously rotating and pinching while opening out a wedged 200-gram porcelain

ball that fits into your palm. Be sure that the base remains thick enough to anchor the pinched form (*figure 1*). After pressing the pinched pot down on to a turntable, use a metal kidney rib to open out the form further and smooth the outside (*figure 2*). Additional coils are added and simultaneously pinched and folded onto the inside surface of the vessel (*figure 3*). Using the left hand to pinch the coil up and the right hand to fold it down, and attach the coil to the exterior wall surface (*figure 4*). The wall surfaces are again smoothed and the vessel is pinched upwards with the thumb and forefinger using both hands simultaneously until the vessel gains height (*figure 5*) and the coil becomes integrated (*figure 6*). My intention here is to achieve an even wall thickness throughout the form and to unify the coils making up the piece. Again, use the metal kidney rib to smooth out the form. The more the walls are stretched

Above: (Left) *Black and White Petal Sequence Vessel with Paisley Centre II*, 8½ in. (21.5 cm) in height, 2012. (Right) *Foliated Vessel with Beige Rim*, 8½ in. (21.5 cm) in height, 2012.



1 Begin by pinching a small pot from a ball of clay, rotating it while pinching to keep the walls even.



2 Put the pinch pot on a flat surface. Open it out with a flexible metal kidney rib while supporting the outside.



3 After smoothing the outside, place a coil around the rim then pinch and fold it to the inner wall.



4 Use the left hand to pinch the coil up and the right hand to fold it down to the exterior wall surface.



5 Pinch the coiled rim upward between your thumb and fingers to raise the height of the pot.



6 An integrated coil and raised rim. The wall should have an even thickness throughout.



7 Building two or more pieces simultaneously, adding coils to one while the other stiffens up.



8 Add stratified layers of colored clay coils using the same technique.



9 Blend the coils using similar blending and joining techniques. Leave an undulating rim, but smooth out any sharp edges.



10-11 Begin the spontaneous brush drawing process, starting with lines dividing the surface into sections, then adding details.



12 Add color, following the pattern defined by the black underglaze lines.

and smoothed, the more translucent the final vessel will be. Each coiled layer should dry sufficiently (not quite to leather hard) but still be slightly plastic before the next coiling cycle begins. This allows the vessel to be strong enough to hold each successive layer.

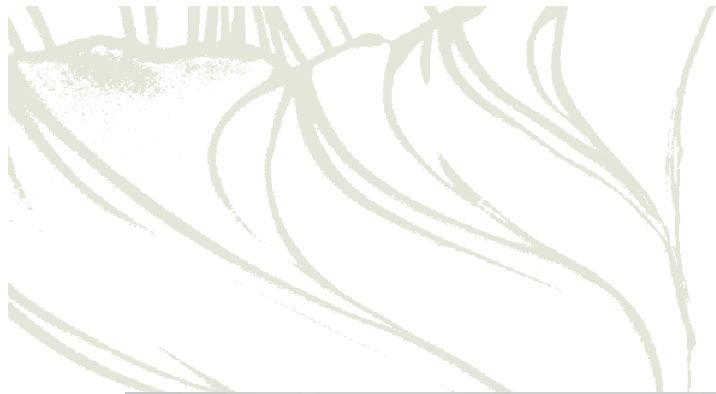
I often work on two or more pieces simultaneously (figure 7). I choose to work on a form from my *Petal Sequence Vessel* series while also working on one from the *Foliated Vessel* series. Although each series is quite different, an interesting dialog and subtle resonance evolves between the vessels by working in this way, which would otherwise not occur.

Incorporating Colored Layers

The stratified colored layers (figures 7 and 8), are made visible by wedging dry measures of oxides (or commercial body stains) into the porcelain clay body prior to coil-

ing. The color of the green band is achieved by adding a quarter teaspoon of chrome oxide and half a teaspoon of tin oxide to 400 grams of porcelain body. Wearing gloves and a mask, the two are wedged until fully integrated and plastic (makes about 4–5 coils). For the beige rim, 1/8 teaspoon of black iron oxide is wedged into 200 grams of porcelain body (makes 3 coils). The colored coils are added to the vessel and incorporated just like the previous porcelain coils were added. Keeping layers visible and separate takes practice and patience (figure 9). To remove unwanted smudges or fingerprints of colored clay from the white areas of the vessel, use a sharp metal kidney rib to scrape the colored clay off of the surface, then use the same rib or a rubber rib to smooth the surface.

For both series of works, after the last coil is added, the rim is smoothed of any sharp areas but left to remain naturally undulating.



The two vessels shown here are ready for a high temperature firing. The one on the left is from the *Foliated Vessel* series and has two stratified layers of colored clay coils added to the top, under black and yellow underglaze decoration. The vessel on the right is from the *Petal Sequence Vessel* series. The inset image shows the interior decoration on the *Petal Sequence Vessel*, showing the paisley pattern in the center.

Spontaneous Drawing

With the building process complete, the pieces are left to completely dry. I then bisque fire the pieces to 1832°F (1000°C) in an electric kiln, after which the vessels are lightly sanded with silicon carbide sandpaper or fine sandpaper, to remove any roughness.

The brush drawing process begins as a spontaneous response to a particular vessel's form. It is mapped out using a long liner or rigger-type brush and black Amaco Velvet underglaze, mixed with rutile at a ratio of ¼ teaspoon colorant to 50 ml of underglaze (*figure 10*). No pencil marks or guidelines are used.

This fine brush drawing on the surface of the vessel makes the often imperceptible porcelain working process visible. In this respect, it constitutes the completion of the piece, as the inner workings of the building process are re-imagined in graphic form (*figure 11*); a unified and continuous growth in execution and development from start to finish being more significant than perfection. Similarly, the integrated oxide bands highlight the working process making the coiled stratified layers visible in color—mirroring the earth's historical plane.

The freehand drawings that I do are an interesting counterpoint to the porcelain vessels in that they are

done at an extremely rapid pace in comparison to the month-long period it takes to complete a vessel. This rapid execution facilitates an undiluted single-gesture response to the form. A spontaneous, yet measured and patient, response to the working method is common to both processes. The brush drawing and freehand drawing processes force you to enter a personal space where focused intuition takes over. The building process, however, is very much grounded and architectural.

Finishing Details

Finally, I add additional color accents using a wide brush and an oxide-stained slip with a pinch or two of tin or vanadium (*figure 12*). These additional accents are something that has evolved over years of working on the *Foliated* series. For me they offer another layer and dimension of interest to a particular piece.

The entire process is concluded by adding white enamel dots, in formation, to selected pieces for an additional layer of interest. The final firing is between 2300°F (1260°C) and 2372°F (1300°C) in an electric kiln. ■

Cheryl Malone is a studio potter living in Cape Town, South Africa. For more information on Cheryl's work, contact her at cherylynne@icon.co.za and at www.capetowncreatives.co.za/cheryl_malone/index.html.