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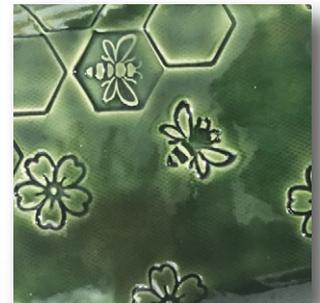
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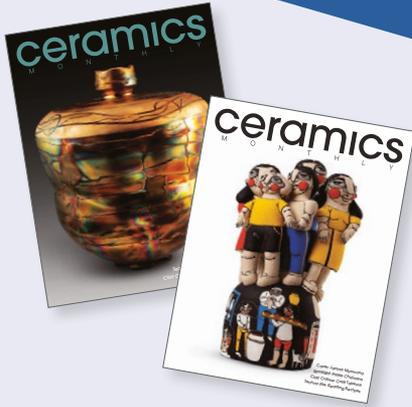
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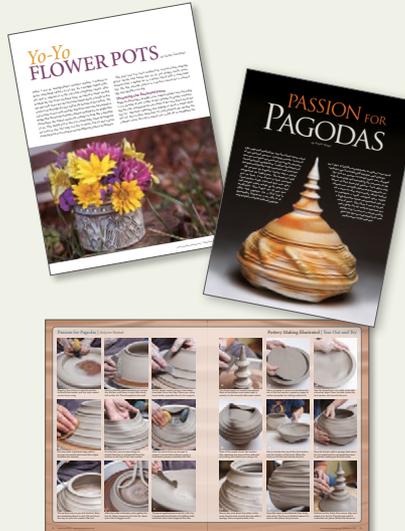
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clay workshop
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Publisher and Managing Director
Bill Janeri

Editors
Jessica Knapp, *Ceramics Monthly*
Holly Goring, *Pottery Making Illustrated*

Acquisitions and Content Editor
Katie Sleyman

Editorial Assistant
Kaitlynn Flanigan

Senior Graphic Designer
Melissa Bury

Production Artist
Kerry Burgdorfer

National Sales Director
Mona Thiel

Advertising Services
Pam Wilson

Online Editor
Jennifer Poellot Harnetty

Editorial and Advertising Offices
550 Polaris Parkway, Suite 510,
Westerville, OH 43082 USA

Executive Director
Mark J. Mecklenborg

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The planter is a functional form with lots of potential for experimentation. Adrienne Eliades packs the process full of play from handbuilding numerous parts to layering surface decoration.

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illustrated by Robin Ouellette

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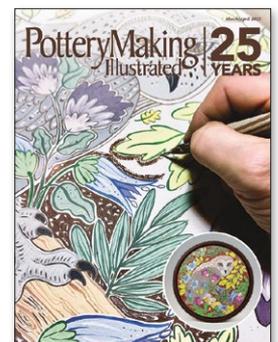
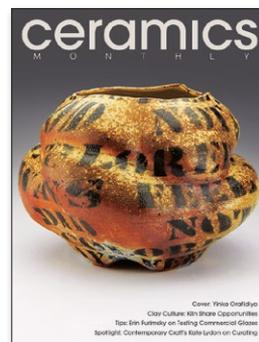
Loading wide, round pieces into a top-loading electric kiln can be hard on the knuckles. Learn how a silk scarf can come to the rescue.

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Welcome to your workshop! Whether you enjoy throwing, handbuilding, surface design, glaze testing, or all of the above, we've pulled together several things for you to try out once you get back to your studio.

If you're familiar with *Pottery Making Illustrated* and *Ceramics Monthly*, then you already know they're packed with practical information, projects, and techniques. The articles shared here provide a sampling of some of the great content in each issue.

You'll also find a wealth of information on the magazines' websites: www.ceramicsmonthly.org and www.potterymaking.org. Guests can access their choice of articles for free on a limited monthly basis. For more tips and techniques, check out hundreds of free posts and scores of how-to videos on the Ceramic Arts Network (<https://ceramicartsnetwork.org>). Enjoy your workshop!



 Jessica Knapp
Editor, *Ceramics Monthly*

 Holly Goring
Editor, *Pottery Making Illustrated*

Cover (clockwise from top left): Mitch Pilkington loading a large pot into a kiln using a silk scarf; Amy Brummond removing excess underglaze from stamped decoration on a mug; Stuart Gair placing wads on the bottom of pots in preparation for a soda firing; Adrienne Eliades trailing glaze on a mug; Ruby Pilven placing a vase template onto a colored-clay slab (Photo: Tara Moore Photography).

Make Play Not Work

by Adrienne Eliades



Exploration through play is fundamental to a vibrant studio practice. We learn through doing, discovering new directions, informed by action and reaction. Engaging with processes and materials without concern for a successful outcome promotes true creative development.

In order to adapt my thinking from the repetition of daily studio work to exploration mode, I need a shift of experience. A change of place, season, or making cycle can initiate such a shift. Summer seems to be a particularly experimental time of year for me. The days are long and lazy, giving permission to slow down. Inspired by plants and flowers dotting the landscape in bright colors of the season, planters come to mind as a form to make in an effort to bring that outside beauty indoors.

Form First

To make a planter, first wedge 2 pounds of porcelain (I use Laguna #16 porcelain) and pat into a ball. Center the clay onto a bat secured on the wheel. Finding the center of the clay, open the ball with two fingers pressing down into the clay, leaving a $\frac{1}{4}$ -inch-thick floor. Pull the wall toward you to define the beginnings of a cylinder that is wider than it is tall. Using a wooden rib, compress and flatten the floor by holding the rib's short flat side against the clay with light pressure. Next, focus on pulling up the walls consistently until they are $\frac{1}{4}$ inch thick. No need to make precise measurements for height and width, simply let the clay flow. Smooth the interior and exterior with a soft, flexible plastic rib to remove

MASON-STAINED PORCELAIN

Cone 7 Oxidation

Laguna WC-617, #16 1 lb
Mason Stain 3–5 tsp

Wearing gloves, form the ball of clay into a small pinch pot. Add the powdered stain inside the pot. Then knead or wedge until mixture is completely homogenized. Vary the amount of the Mason stain used based on the desired saturation.

throwing lines and excess slip. Compress and smooth the rim with a synthetic chambray cloth or piece of plastic. Use a cut-off wire to immediately release the form from the bat to ensure an even cut while wet. With the form resting on the bat, remove the bat from the wheel and set it aside (1).

Meanwhile, make pigmented porcelain. Measure out 1 pound of clay. Holding the ball in one hand, impress the thumb from your other hand into the ball, forming a small pinch pot. Measure out 3 teaspoons of stain and place it in the pinched wet-clay bowl (2). Wearing gloves, wedge the ball until all the stain is incorporated and homogenized; this will take 5–6 minutes of wedging. Work the materials together until there are no speckles of stain and the ball is pigmented a solid color. Using the steps from above, throw the pigmented porcelain into a wide, short dish that measures the same diameter as the larger cylinder's exterior base (3).

Add and Subtract

Once the two cylinders are leather hard, roll out a slab $\frac{1}{4}$ inch thick to match the wall thickness of the thrown forms and allow it to set up on a piece of drywall until firm but still flexible. This may take 1–2 hours depending on studio conditions and weather. In the meantime, trim the bottom and sides of each cylinder to match the thrown wall thickness ($\frac{1}{4}$ inch). Smooth with a sponge and a plastic rib. Cover the thrown pieces in plastic or place in a damp box until the slab is set up.

Experiment with adding slab shapes to the rim of the large cylinder to enhance the form. Let play lead the way: cut shapes freehand and hold them up to the form to see different configurations. Here, two half-moon shapes are cut from the slab (4)



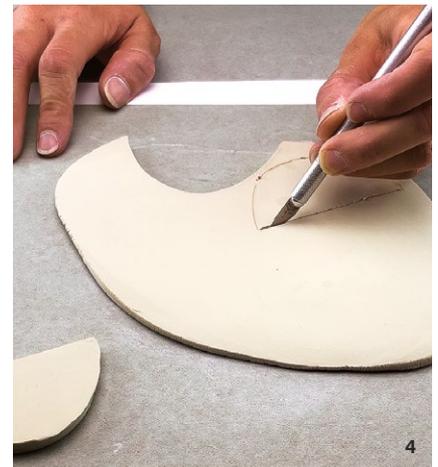
1 Throw a cylinder wider than it is tall. Leave resting on bat and set aside.



2 Measure 3 teaspoons of Mason stain and place in a 1-pound pinched bowl.



3 Throw a short dish with the pigmented clay to the same diameter as the cylinder.



4 Cut identical half-moon-shaped handles from a $\frac{1}{4}$ -inch-thick slab.



5 Slip and score the rim and bottom edge of the half-moon-shaped slabs.



6 Affix each half moon to the rim and press firmly, working the edges together.



7 Sketch and cut out drainage holes on the bottom of the larger cylinder.



8 Sketch and cut out a band of evenly spaced rectangles on the pigmented cylinder.



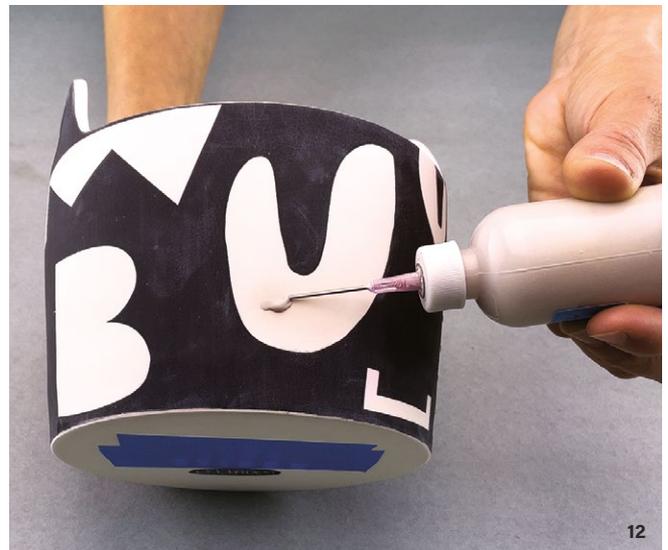
9 Wet and apply the paper stencils to the leather-hard form. Use a flexible plastic rib to smooth any air bubbles.



10 Use a hake brush to apply two coats of Amaco Jet Black underglaze to the entire exterior of the piece.



11 After bisque firing, apply painter's tape to the exterior of the drainage holes to block off, then glaze the interior of the piece.



12 Fill in the negative-space shapes with glaze using an 18-gauge slip trailer.

mimicking handles. Slip and score the rim and bottom edge of the half-moon slabs (5) and affix each to the larger cylinder, firmly pressing the two edges together (6). Cover and let the moisture content homogenize overnight.

The next day, refine the half-moon slabs and cut out an interior shape to make them functional handles if desired. Additionally, sketch and cut out drainage holes on the bottom of the larger cylinder (7). To relate the top form to the bottom form, sketch and cut a band of rectangles in the pigmented cylinder (8), leaving the bottom third solid to capture excess water. The holes allow the water to evaporate more quickly.

Black and White

Once forming is complete, it's time for surface decoration. In keeping with the theme of play and experimentation, sketch and cut out paper stencils. Free drawing these shapes gives the motif a sense of spontaneity. **Tip:** I make my paper stencils from tree-free sugar-cane paper. This material is less likely to tear when saturated with water and underglaze. Apply the paper stencils to the leather-hard form by dipping each piece in a clean bowl with fresh water then sticking it to the surface of the pot. Using a flexible plastic rib, lightly press each stencil to adhere it completely and remove any air bubbles (9). Once all the stencils are applied, let them dry until the paper is no longer reflective when exposed to a light source. This will take at least 10 minutes, but possibly longer.

Next, coat the entire outside of the piece with two layers of Amaco Jet Black underglaze (10), allowing a few minutes of drying time in between coats. Let the whole piece dry until the surface is no longer reflective in the light. Carefully remove each stencil using the tip of an X-Acto knife or tweezers to lift an edge, then pull up the stencil. Leave both pieces uncovered and assembled until bone dry, then bisque fire to cone 06.

In Full Color

After the pieces are bisque fired, sand any imperfections with 220-grit fine sandpaper. Wipe the entire surface with a damp sponge to remove dirt, dust, and finger oils. Glazing the interior of a pot with drainage holes can be tricky. Apply painter's tape on the exterior of the drainage holes to block them off (11). Firmly press the tape edges again to the bisque ware to ensure there are no air gaps. Pour a liner glaze into the interior, tilting and rotating the piece to pour the glaze out while coating the inside. Let it dry for a few hours to overnight.

Next, fill in the shapes with glaze. Use an 18-gauge slip-trailing bottle loaded with glaze to gain greater control of flow and articulation within the lines (12). This also builds up a thicker layer of glaze and eliminates the need for multiple layers. If you color outside the lines, remove the glaze and sharpen edges with a clean, damp paintbrush. Color in each shape, alternating colors to create a dynamic palette. Do not apply any glaze on the Jet Black Amaco underglaze or to the pigmented porcelain base. Firing the piece to cone 6–7 slightly fluxes the underglaze and vitrifies the surface. **Caution:** Underglaze that is not covered by a glaze is not a food-safe surface.



Firing Schedules

Cone 06 Bisque Firing Schedule

Ramp 1 . . . 50°F (10°C)/hour to 150°F (66°C),
5-hour hold

Ramp 2 . . . 150°F (66°C)/hour to 1100°F (593°C)

Ramp 3 . . . 208°F (98°C)/hour to 1830°F (999°C)

Cone 6 Glaze Firing Schedule

Ramp 1 . . . 50°F (10°C)/hour to 180°F (82°C)

Ramp 2 . . . 350°F (177°C)/hour to 2000°F (1093°C)

Ramp 3 . . . 150°F (66°C)/hour to 2210°F (1209°C),
10-minute hold

Ramp 4 . . . 500°F (260°C)/hour to 1910°F (1043°C),
10-minute hold

Ramp 5 . . . 90°F (32°C) to 1400°F (760°C),
10-minute hold

Turning work into play isn't hard. It's simply having fun and being joyful and energized. A good start is to schedule play into your studio time, once a week, a month, or a season. Just like work, play takes practice to achieve a happy, flowing state of mind. Repeat a play practice regularly with pure abandon for a successful outcome. What will you do to play a little more in the studio?

Adrienne Eliades lives and maintains a studio practice in Vancouver, Washington. In addition, Adrienne is the HOT CLAY Program Coordinator for Idyllwild Arts Summer Program in Idyllwild, California, and has presented over 20 workshops nationwide. See more of her work at www.adrienneeliades.com.

HOME FILTRATION SYSTEM

by Nathan Portnoy

Have you started working with clay at home and away from community or shared studio facilities? Save your plumbing with an inexpensive, do-it-yourself water-filtration system.



1 The assembled DIY water-filtration bucket system. 2 Interior view of pipe assembly. Install the pipe component in the bucket so that the top of the pipe is an inch from the top of the bucket.

COVID-19 has changed the way many of us are working. As rules changed and our ability to gather decreased, I had many students asking me about setting up makeshift studios at home. In these times, any activity we can find solace in is well worth the effort you have to put in upfront to get lots of joy from in return. One of the initial challenges to overcome in setting up a home studio area is the potential strain on your home's plumbing.

Gathering Materials

Sediment from clay will accumulate in pipes and drains and grow mold, while glazes will settle in them to build a hard mass. The result is dreadfully blocked pipes requiring a plumber (not to mention the environmental impact of dumping clay and glaze materials down the drain). An investment of around \$40 in materials for this project could save hundreds of dollars later. One of the most inexpensive things you can do to save your pipes is make this simple and effective filtration system (1). You will need the following components in 1-inch diameters:

- PVC threaded female adapter
- PVC male adapter
- Slip-elbow PVC fitting
- 2-foot length of PVC pipe

Additionally, you'll need a 5-gallon bucket with a gasket lid and a roll of aluminum window screen. You'll also need a 1-inch hole saw, a utility knife, and a heat gun (optional).

Assembly and Use

First, test fit the pipe with the elbow attached. When placed inside the bucket, your goal is to have the top of the pipe sit an inch below the rim (2). Mark and cut the pipe. Next, using a hole saw, cut a hole in the bucket $\frac{1}{4}$ inch above the inner floor. For a watertight fit, use your heat gun or torch to heat up the hole and press fit the male adapter. Attach the female fitting to the outside to hold it all together (3). Gluing is not necessary for any of the fittings. If you do not have a torch or heat gun, just dry fit them. Now, it is time for the lid. Cut the inside ring of the lid using a utility knife and remove (4). Using the outer diameter of the lid as a template, cut your screen to fit. Lastly, remove the gasket from the lid, place the screen in the channel of the lid, set the gasket back into the channel, and press firmly for a tight fit. You are all set!

Using your new, inexpensive filtration system is easy. Place the bucket in your sink and dump your dirty water from throwing and cleaning into the filtration bucket. The large chunks will stay on top of the screen, making them easy to gather and discard. Over time, the heavy particles will sink to the bottom of the bucket as it fills with water. When the bucket is full of water, the top inch of



3 On the exterior of the bucket, the threaded female PVC fitting secures the interior piping and acts as a drain for the top inch of clear water when in use. 4 Use a utility knife to remove the center of the bucket lid, cover the bottom with a piece of aluminum window screening cut to size, and replace the gasket to keep it in place.

cleaner water will flow out of the bucket through the pipe, allowing the clay to settle out of the rest of the water. It is important to clean out the bucket about once a month, or more often depending on use. To clean, scoop solids out with a large serving spoon or a measuring cup. If no glaze material is present, this clay sediment

makes a wonderful new clay starter. If glazes are present, make sure you dispose of sediment properly. Once the bucket is light enough to lift, you can empty the water outside and start all over again!

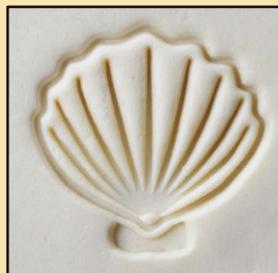
Nathan Portnoy is a ceramic artist and educator based in Dallas, Texas.

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A LEVEL OF ALCHEMY

by Michelle Im



Ceramics Monthly: How did your work in earthenware develop?

Michelle Im: When I first started out in ceramics, I was immediately attracted to porcelain and the results you can get in cone-10 gas firings. As I experimented with different clay bodies, I learned more about where ceramic traditions come from. It was a gradual process, starting with high-fired clay and glaze, then moving to mid range, and then eventually to low-fire materials.

When I got into Delftware and Italian majolica work, I fell in love with earthenware. It surprised me that you could get such stunning results with a clay body I typically looked upon as a material for beginners. Earthenware is primitive, ubiquitous, and the high-iron content makes for a strong color that stains everything. But, when it is dressed and manipulated (as in the Delft and majolica traditions), it possesses a hidden power of elegance and maturity, like porcelain. These traditions aimed to elevate the material by emulating highly valued porcelain-ware aesthetics. There is a little bit of a game involved when you work with earthenware. If the inherent color and surface are not what you'd like to showcase, the question becomes how to transform it into something different that doesn't bear the typical associations.

As I switched to an earthenware clay body, my process naturally became more handbuilding focused. The two felt like they were interconnected. While there is an impressive quality about wheel throwing, for me, handbuilding relates to the idea of using a perceptibly low-skilled forming method to make something refined. It's a

relatively intuitive process, and it lets clay do what it does best—be molded by hand. With pinching or slab building, you can choose to allow forms to be as lumpy as you want. I use handbuilding to get close to a uniform shape for a classic form and then finesse the irregularities. The imprints left behind give a subtle texture that adds to the liveliness of my decorations. Finding the balance between intention and spontaneity is a constant part of the process.

Ceramics makes you aware of how ideas travel and evolve over time. I am always inspired by how new ideas can form out of a lack of resources or technology. There is a level of alchemy, which is part of the decorative stage.

Korean Buncheong ware was one of my first sources of inspiration to start using slip decoration. Although my work does not directly reference the aesthetics of this traditional stoneware, I identify with the whimsy, immediacy, and humor contained in its slip gestures. I cover my earthenware with white slip that I carve through, making repetitive marks that create movement within the surface decoration. I strive to emanate this energy through colorful patterns and imagery.

I often look to various forms of Latin American folk art to display a sense of spirituality in my color choices. Living in New York City, I started depicting rats and pigeons in my work. But in general, I find a wealth of inspiration in the natural world. My goal is to create ceramic objects that add warmth and playfulness to acts of everyday rituals.

Photo: Alexandra Genova. www.alexandragenova.com.



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TRANSFER + STAMP + COLOR

by Amy Brummond

As a potter, I have found that my artistic voice has evolved through the use of ceramic transfers, specifically the newsprint transfers from Isla Transfers (www.islatransfers.com). When I first started using transfers, I was creating all my pieces on the wheel and then putting the transfers on each piece at the leather-hard stage. This method worked for a couple of years but the timing had to be just right, and I didn't feel in control of the pace of my making. A few years ago, I decided to shift my making from wheel throwing to handbuilding and that's when my personal surface design aesthetic emerged. I now handbuild all of my pieces and use damp boxes to control the pace of my making cycle. As both a mother and an artist, I find the use of damp boxes in the studio to be essential.

Forming the Blank Canvas

For me, making mugs is like eating comfort food. When the pandemic first hit, I found myself returning again and again to the mug form. When making a mug, there is a familiarity between maker and clay—like an easy conversation with an old friend.

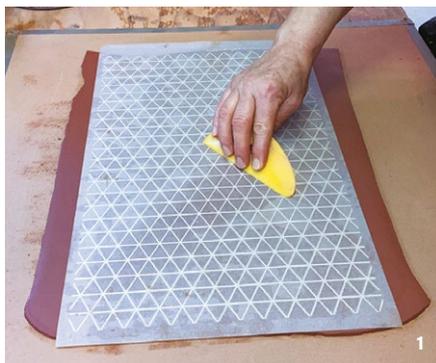
Each mug starts as a flat, ¼-inch-thick slab from a mid-range, red-stoneware clay body. I use a Slab Mat, instead of canvas, to roll the clay because it has some heft to it that holds its shape and supports the clay while rolling it through a slab roller. Let the slab set up for a bit—I do this on a piece of drywall. It is important to keep a close eye on the slab at this stage so that it doesn't dry out

past the point of workability. When the slab has firmed up a bit, use a yellow Mudtools rib to smooth and compress the surface of the clay on both sides.

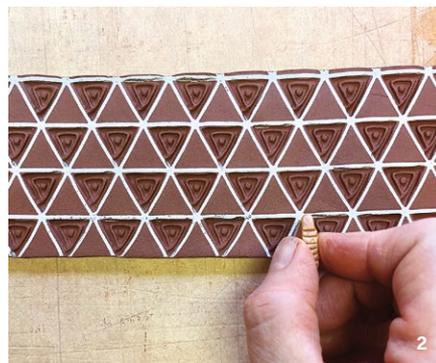
Bringing the Design to Life

Now you have a blank canvas. It is a moment that is full of potential and possibility. I approach the slab canvas as though it is a textile or piece of fabric. I consider both pattern and texture, while also imagining a color palette that will bring the entire design to life. The first consideration, pattern, is addressed through the use of newsprint transfers in different prints and colors. After choosing a transfer print, apply it to the flat slab. Using both yellow and red ribs, make sure the entire print is transferred to the slab (1). Next, remove the transfer paper and let the freshly printed slab dry for a few minutes before moving on to the next consideration in the design process, texture.

The use of stamps in my work has evolved alongside the use of newsprint transfers. The first design that used both stamping and transfers was in my *Bloom* series. This surface-design method used the hexagon print as a template, with texture provided from a daisy stamp from MKM Pottery Tools. I love this design and continue to explore different color combinations, with my all-time favorite being the *Double Rainbow Bloom* colorway. You cannot go wrong with rainbows, right?



1 Apply the newsprint transfer to the slab. Compress with ribs to transfer fully.



2 Stamp the mugs within the transferred patterns while still flat.



3 Once formed, allow the finished mug to dry slowly, then bisque fire.



4 Prepare the color palette. These applicators have 20- and 18-gauge tips.



5 Using an applicator, inlay underglaze into the stamped areas.



6 Use a damp sponge to wipe away any excess underglaze.

I have since used my favorite Isla Transfer prints as templates to create my own stamps that will fit within the cells of the prints. The most common prints I use from Isla are Panal (the hexagon), Cuadriculado (the grid), and Triangulos (the triangles).

Before stamping begins, cut out mug blanks from the printed slabs that are approximately 10¾ inches long by 2¾ inches high. I can usually get five mugs from one printed slab. Stamp each slab (2) before forming the mug shapes. This is a stage when I rely heavily on my damp boxes to control the drying process. I usually roll, print, and stamp the slabs one day, and then come back to make the mugs the following day (3). I have gone away for a week or longer during different stages of the process and returned to a piece that can still be finished.

Dry the mugs upside down on a piece of upholstery foam covered with dry-cleaning plastic. Flip them during the drying process to ensure even drying, then bisque fire.

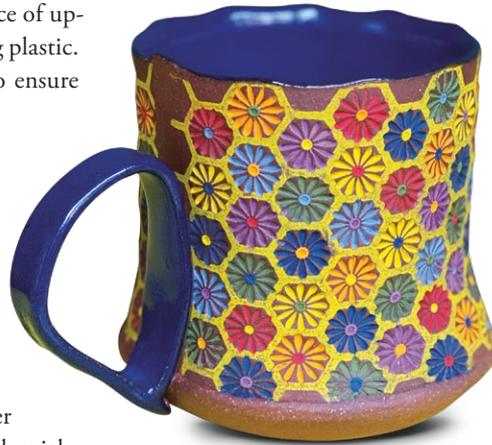
Awakening the Senses

For me, this is the stage when the piece really comes to life. Working in batches, I add color to the stamped area of each mug using Finesline precision applicators (4). I prefer the 20-gauge applicators (5), but also have an 18-gauge tip for thicker underglazes. I love playing around with

different color combinations, and have a deep fondness for using all the colors of the rainbow at once. After the color has been inlaid into the stamped area of the mug, let it dry to the point where the underglaze is no longer glossy. Then, wipe away the excess underglaze (6) before moving on to the final step—glazing.

I love the look of a matching interior liner glaze and handle glaze color. I use commercial glazes and brush them on using two sizes of fan brushes. The smaller brush allows me to get into the curve of the handle without slopping glaze all over the rest of the mug surface. I leave the rest of the exterior unglazed. Once the glaze has dried, fire the mugs to cone 5 in an electric kiln.

Combining pattern, texture, and color has been an exploration in answering the question, “What happens when I do more and push an idea further?” Challenging myself to keep chasing different ideas down the rabbit holes that creativity provides has yielded the greatest artistic dividends. I invite you to do the same.



Amy Brummond is the clay/color enthusiast behind Pine Zen Pottery. She lives in Ramsey, Minnesota, with her husband and two sons. You can learn more about Amy at www.pinezenpottery.com. She can also be found @pinezenpottery on both Instagram and Facebook.

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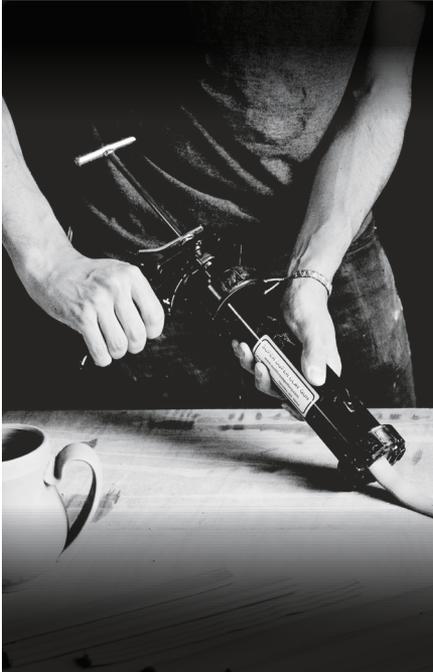
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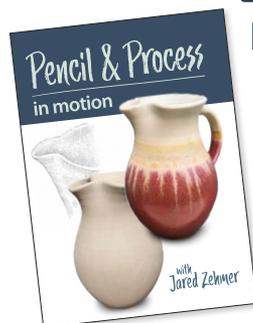
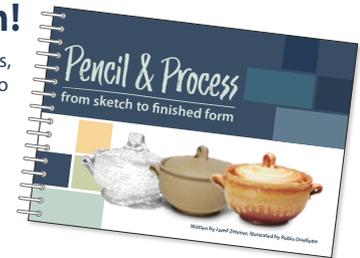


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Creating Colorful WRAP VASES

by Ruby Pilven

My wrap vessels were inspired by my love of color and nerikomi, the Japanese technique of building forms with colored clay. My wrap vessel stemmed from my exploration with creating wrap-around rings and has evolved into an extensive range of contemporary and decorative forms. Having studied printmaking at university and learned ceramics from my parents, I married these passions to create bright and intricately layered porcelain artworks that are both beautiful and functional.

My aesthetic is unabashed neo-chintz that references contemporary style and culture. The vibrant color is accentuated with 12-karat-gold-luster highlights. My works reference the landscape in which I live and work. The forms I create are based on historical

pottery forms and imagined structures and act as storytellers and props from domestic and natural spaces, in order to inject joy and happiness into everyday life.

Mixing the Colors

The first step in creating a colorful wrap vessel is mixing the stain into the porcelain to color the clay. I like to use porcelain as it is luminous and the colors really pop when fired to 2372°F (1300°C) (cone 10). For this wrap vessel, I have used a range of stain colors including blue-black, brown, black, light orange, pink, royal blue, and turquoise (refer to the chart on page 18 for stain measurements). You can use any stain colors, but these are what I have used to





1
Combine porcelain with water, mix into a paste with your finger, then wedge.



2
Twist two pieces of colored clay together with white clay to create a marbled effect.



3
Roll colored-clay slabs. Rotate and flip the slabs to ensure they stretch evenly.



4
Rub slip-coated fingers over a colored slab to make crumbs, then roll to embed.



5
Roll out your base clay, tear colored-clay slabs, and place them onto the base slab.



6
Roll the slab between each color layer addition to ensure even lamination.



7
Push pink dots into the slab, roll, then push small black dot into pink dots.



8
Cut strips of chocolate-brown porcelain and lay them across the colored slab.



9
Use a template to determine what size to cut your slab sections into.



10 Cut around the template, bevel the ends, score the rounded side, then apply slip.



11 Line the edges up as you roll tightly and evenly. Pull the PVC pipe and tissue out.



12 Attach the wrap vessel to the bottom slab. Cut around the base and blend together.



13 Apply gold-luster dots to the exterior and rim using different brush sizes.

STAIN TO CLAY RATIOS

Color	Stain Colorant	Clay Quantity	Stain Quantity
Blue-Black	English Blue and Black	2.2 lbs (1 kg)	5 level tsp of Blue, 2 tsp of Black
Chocolate Brown	Black (cobalt free) or Chocolate Brown	2.2 lbs (1 kg)	4 tsp of Black (cobalt free) or Chocolate Brown
Black	Black	2.2 lbs (1 kg)	8 tsp of Black
Light Orange	Orange	2.2 lbs (1 kg)	5 tsp of Orange
Pink	Red	2.2 lbs (1 kg)	2 tsp of Red
Royal Blue	English Blue	2.2 lbs (1 kg)	2 tsp of English Blue
Turquoise	Turquoise	2.2 lbs (1 kg)	5 tsp of Turquoise

create this piece. Before making a final artwork, it is good practice to test out a range of different clay-to-stain ratios to see the variation in hue and what will work at your chosen firing temperature.

Make a small well in a 2-pound (1 kg) ball of porcelain and then put the stain into the well and add half the amount (see chart above) of water (1). Make sure you are wearing a properly fitted respirator and protective gloves. Stir the water and stain mixture to a thick paste, then wedge the color into the clay on a wedging board or table. If you have excess colorant on your gloved hands, dip them in water and continue to wedge, transferring the colorant back into the clay. Use these same steps to prepare separate balls of clay with each color you want to use. To create the marbled blue-black effect, twist two 500-gram balls of blue-black-stained clay into white clay until the color striations reach the desired marbling (2).

Rolling Out the Colors

Once the clay colors are mixed, roll them out into very thin slabs. I roll my clay out on an MDF board, but if you do not have one,

you can roll them between two thin sheets of calico material. Roll out the colored clay with a rolling pin, rotating it in different directions until it is approximately 2 mm thick. Do this for all of the mixed colored clays except the pink and black (3). You will use these colors later when creating the layered slab.

The black-flecked clay slab is something I created by accident many years ago. Frustrated in the studio one day, I frantically rubbed my black-clay-covered hands together until the clay crumbled over the porcelain slab (4). I rolled it, then . . . presto! Follow this same process to create this type of effect. A small, 2-cm (or 200 grams or less) ball of black clay will work.

Creating the Colored Slab

Roll out stoneware clay (any type of clay with the same shrinkage rate as the porcelain you are using) to around 1 cm thick. Start applying your colors, layer by layer. I like to tear small sections and arrange them into a spaced, yet interconnected pattern (5). Make sure you allow for a pass of the slab roller or rolling pin to flatten the surface between each color layer, otherwise you may find the



surface gets too thick and the design smears. In other designs, you can cut the clay using cookie cutters or a knife. This provides more precise design patterns.

In this wrap vessel, I have applied torn pieces of colored clay to the slab in multiple layers. From first to last, the layers were: speckled black/white, royal blue, marbled blue-black, light orange, and lastly turquoise (6). Next, create small (1 cm) round pink porcelain dots and squash them down onto the surface (7). Roll a rolling pin over it top to bottom to ensure the round dots do not smear or distort. Then, roll the slab completely. Apply smaller (2mm) round, black porcelain dots into the middle of the pink dots, then flatten the surface by rolling it again. Once this is done, cut strips of chocolate-brown porcelain (8) and lay them across the colored slab in a considered and balanced way (see 9). Flatten the slab with the rolling pin one last time.

Creating the Wrap Vessel Form

Cut your slab into sections, approximately 20×20 cm in size (9). I cut my clay a bit smaller than my template because I roll my clay out further with the rolling pin when creating a form. I do this because if I made the slab very thin when making the colored layers, then the colors would distort and potentially become too dry and fragile to handle.

On a non-stick MDF board, roll out the slab a little thinner using a rolling pin. Roll it until it is approximately 8 mm thick or to your desired thickness. Rotate the slab when rolling to ensure consistent spreading of the added colored-clay bits. Place a pre-made wrap-vessel template (26 cm in length × 22 cm in height) onto the slab and cut around it using a knife. Bevel the end edges with a Xiem X-bevel tool or a knife on an angle. Scratch the rounded side using a serrated kidney tool and apply vinegar or slip (10). Wrap tissue paper around a 5.5-cm-diameter PVC pipe or cardboard tube and roll the slab up until the seam is sealed (11). Pull the PVC pipe out and then the tissue paper, and place the wrap vessel on the MDF board to stiffen up.

Roll out a thin slab to the same thickness of your wrap vessel to form the base. Score the bottom of the wrap vessel, apply

vinegar, and place it on the bottom piece of clay. Cut around the vessel and blend the seam between the base and the vessel with a wooden sculpting tool (12). Tap the top with a wooden paddle or flat piece of wood. Compress any joins with a wooden sculpting tool and smooth areas with a wet sponge.

Cleaning, Glazing, and Applying Luster

Once finished, I put my pots under plastic for about two weeks in a moderate-temperature room, drying them very slowly and changing the plastic each day to prevent condensation and cracking. Once bone-dry, I clean my pots with a wet sponge. Some people prefer to clean their pots by sanding them after the bisque firing, but I prefer to do it this way as it's less dusty and strenuous. **Caution:** Do not make your bone-dry pots too wet as they may crack. Once they have dried, bisque fire them to 1796°F (980°C), apply paraffin wax to the bottoms, then dip them into a bucket of clear stoneware glaze. The final firing is to cone 10 (2372°F (1300°C)).

After the glaze firing, apply gold-luster accents. It is very important to be in a ventilated room, preferably with an exhaust fan or near an open window and wear gloves and a properly fitted safety respirator when working with lusters. For this wrap vessel, I applied small dots with a very fine 1-mm brush and gold banding around the rim with a thick 12-mm brush (13). Make sure when you apply your luster that it is not too thick, thin, or runny. Make sure you do not apply the luster repeatedly or you will make the luster go matte and it may burn off or flake off. Use a clean brush and make sure your pot is dry and free from dust and anything oily, especially hand moisturizer (as this repels the luster). When you have finished, fire your pot for a third time to 1436°F (780°C).

All photos: Tara Moore Photography.

Ruby Pilven is a ceramic artist based in Ballarat, Wadawurrung Country, Australia. She creates highly colorful and decorative porcelain and stoneware functional ceramics and jewelry, which are inspired by her natural surroundings in the bush. The gold in her work is inspired by her hometown of Ballarat, a major Victorian gold rush town.

WEDGING

Wedging is the process of mixing clay by rotating and compressing it in a continuous rocking motion. The purpose is to homogenize the clay and to remove all air bubbles.

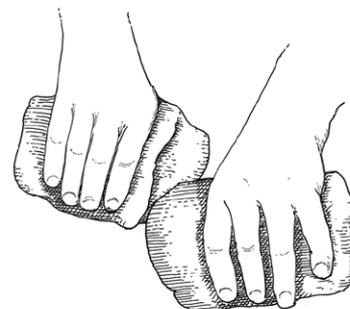
PREPARATION



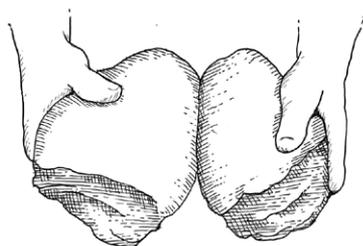
1 Form a rectangular clay block.



2 Compress the block.



3 Separate the block into two halves.



4 Put one half on top of the other, then push it down to compress it.



5 Turn the block 90°, then push down to compress it again.

SPIRAL METHOD

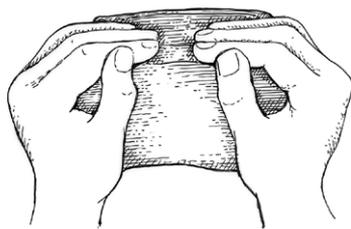


One hand lifts and turns the clay while the other hand presses down.

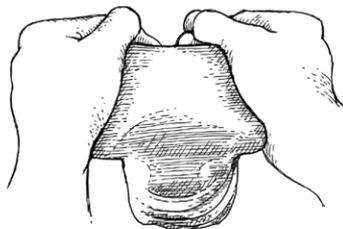


Lift the clay, rotate 1/4 turn, and press down on the opposite side.

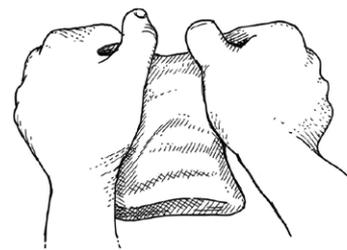
RAM'S HEAD METHOD



Position hands by cupping both ends of the block.



Turn the top of the form while rocking it toward you.



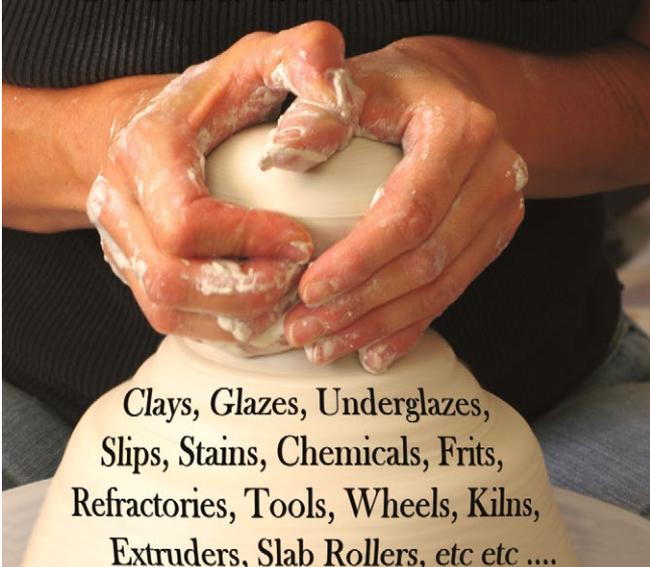
Push the clay away while turning it inward.

Robin Ouellette

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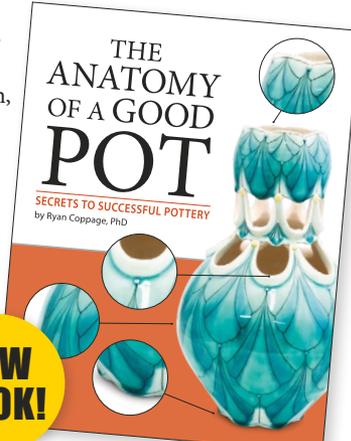
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AIR BUBBLE MYTH

by Sue McLeod

While pockets of air in clay can exacerbate problems during a firing, the air itself is not the culprit, despite some commonly held and shared beliefs.

Defining the Terms

Bone Dry: The state of dryness of clay at which the maximum amount of moisture has evaporated from the clay, given the relative humidity of the air around the clay.

Dehydration: The driving off of water, chemically bound as hydroxyl or OH⁻ ions, from the clay lattice. This is an irreversible process. It typically occurs when the clay is heated to between 1112°F (600°C) and 1292°F (700°C), according to Robert Fournier in his *Illustrated Dictionary of Practical Pottery*.

Water Smoking: When the temperature in the kiln reaches the boiling point of water (212°F (100°C) at sea level) and moisture in bone-dry ware begins to turn to steam. This is a fully reversible process as long as it is complete before the clay is heated above 482°F (250°C).

The Myth

There's a common belief in ceramics that leaving pockets of air in your clay, either due to insufficient wedging or by creating an enclosed form, leads to explosions in the kiln. The belief is often communicated in these ways: "Poorly wedged clay containing air bubbles will explode," or, "If you create an enclosed form, you need to poke a hole for the air to escape or it will explode."

While it's true that enclosed pockets of air in your clay can lead to explosions, the explosions don't have anything to do with air being trapped and unable to escape. The explosions have everything to do with trapped water. If your pieces aren't 100% dry inside and out, problems can arise during the firing.

What Happens When Water is Heated?

At room temperature, water naturally evaporates. Natural evaporation happens relatively slowly and is dependent on the humidity of the surrounding atmosphere. If the relative humidity of the surrounding air reaches 100%, evaporation stops until the moist air is replaced with drier air, and evaporation can continue.

As water is heated, the molecules start to move faster and evaporation speeds up. If we continue to heat to boiling temperature, water (a liquid) converts to steam (a gas). At sea level, this occurs at 212°F (100°C).

Three important facts about water turning to steam:

1. It expands greatly in size—over 1500 times
2. It can produce a high amount of pressure
3. This all happens at a very high speed

Consider boiling a kettle of water. As the water begins to boil, you hear a faint whistling sound. As more water converts to steam, it expands, increasing the pressure in the kettle, which increases the speed at which the steam passes through the tone hole and the whistling sound gets louder.



A The aftermath of a clay explosion in a bisque firing due to firing wet pots. **B** Check for moisture during candling. When my safety glasses fog up it means there is still moisture escaping and candling the kiln should continue.

When the kiln temperature starts to climb, any moisture left in the clay starts to evaporate faster. If that moisture reaches boiling temperature before it has a chance to evaporate, it will convert to steam. The expansion, pressure, and high speed of water converting to steam within a clay body will cause the clay to explode, unlike the kettle that allows the steam to escape. This is why it's so important for clay to be completely dry before it is fired.

Do Air Bubbles Cause Explosions?

When clay is wet, all the spaces in between the clay particles are filled with water. As the water evaporates, the clay becomes porous, meaning there are tiny pathways of void space (air) in between the solid clay particles. Essentially, bone-dry clay is full of teeny tiny pockets of air. Air within the clay is not a problem. If we make a piece and we leave an air bubble in the clay, that air pocket does not directly pose a risk of explosion. Air is free to move through those tiny porous pathways in the dry clay.

Only water leads to explosions. It's a causation/correlation misconception to say that air causes explosions. While enclosed air doesn't cause explosions, it can prevent thorough drying and trap moisture, which does cause explosions. When we enclose air bubbles within a clay form, that pocket of air provides water molecules with a nice humid place to hang out.

A thin piece of clay with an air bubble will dry and fire without issue. When the clay is thicker, it can feel very dry on the outside while the inside still contains moisture. When the kiln temperature rises, the air pockets fill with water vapor, which builds pressure as water turns to steam. The pressure of the steam causes the clay to explode from the inside (A).

Say you throw an enclosed form or you join two pinch pots together. Poking a hole will promote more thorough drying before the firing by allowing dry air to circulate so evaporation can occur from the inside as well as the outside. The bigger the hole, the faster the piece will dry. During the firing, the hole gives the steam a pathway to exit, preventing pressure from building up and hopefully, preventing an explosion.

But, is it possible to leave air bubbles in your clay and make enclosed forms without holes in them that don't explode in the kiln? The answer is yes! If the clay is 100% dry inside and out at the time it reaches boiling temperature, there is zero risk of explosion. But on the flip side, explosions can occur even when air bubbles are not present if your clay isn't thoroughly dry.

How to Ensure Pieces Are Dry

Two factors contribute to quicker evaporation: one is heat and the other is air circulation.

The most common advice is to candle your kiln, which means you turn the kiln on low and hold it just below boiling temperature until all the moisture has escaped. While this is good advice, it isn't fail-safe, especially with thicker clay. Candling doesn't always complete the drying process in a reasonable amount of time. While I do recommend candling your kiln as a final measure, I would suggest using air circulation initially so your pieces are as dry as possible before they enter the kiln.

Air circulation is effective because evaporation speeds up as the humidity of the surrounding air decreases. If the air is completely still, evaporation will cause a cloud of moisture to form around the piece, slowing down further evaporation. If that moist air is replaced with drier air, evaporation continues. The easiest way to accomplish this is by using a fan to circulate the air around your drying wares.

Make sure your pieces are already fairly dry before putting a fan on them or they may dry unevenly and crack. While the fan is on, periodically turn your pieces over to allow the air to reach all sides. If you can add heat to the circulating air, this will further speed up drying. If your kiln is vented, be sure to turn the vent fan on while candling to help remove the humid air in the kiln.

Moisture Test

Damp clay is cool to the touch, whereas dry clay is room temperature. If your pots feel cool, they're probably not ready for the bisque firing. Be sure to check the bottoms and insides. Once you're sure your pots are thoroughly dry, you can load them into the kiln and start the candling process for good measure. Keep the kiln temperature low until all residual moisture has escaped.

A simple way of checking for moisture escaping the kiln is to hold a piece of glass or plastic (I use my safety glasses) near one of the open peepholes during candling. If it fogs up, this is a sign that there's still moisture escaping the kiln (B). Continue candling until there is no longer any sign of moisture and then proceed with the firing as usual.

Sue McLeod is a potter and studio technician in Victoria, British Columbia, Canada. She teaches online glaze classes and writes articles about glazes and studio tips on her blog at www.suemcleodceramics.com.

*If you love learning about and discussing firing and glazes, check out McLeod's free social learning Facebook group, *Understanding Glazes with Sue*. The group is full of videos and discussions about firing, mixing glazes, and fixing various glaze issues. McLeod also teaches an online class, *Mastering Glaze Consistency*. To learn more about it, visit <https://suemcleodceramics.com/masteringglazeconsistency>.*

A Thoughtful
SODA
APPROACH

by Stuart Gair





2



3



4

1 Globe, 15 in. (38 cm) in height, soda-fired stoneware. 2 Gravy boat, 7 in. (18 cm) in length, soda-fired stoneware. 3 Vase, 10 in. (25 cm) in height, stoneware. 4 Cream and sugar, 7 in. (18 cm) in length, soda-fired stoneware.

An ongoing investigation of the soda-firing process continues to provide new surprises and facilitate new avenues of exploration. A common misunderstanding of the process is that it is random and putting a piece into an atmospheric kiln is the equivalent of passing that piece “on to the kiln gods.” One of the most important things I have learned about this particular process is that most of the work goes into preparedness before lighting the burners and being able to anticipate the final outcome as much as possible. Particular attention is given to form, materials, placement, and the way in which the kiln is fired.

Form and Interaction

The form of each piece plays a crucial role in how the soda and flame interact with it. Spherical shapes encourage the flame to wrap around them and oftentimes accentuate their form, depending on where they are placed in the kiln. Surface results tend to be subtle on a spherical shape and show gradation in tone, hue, and sheen

because of both the way they record the flame path from all directions and the angle at which the form meets the shelf. Angular or rigid forms respond very differently to the flame and soda. The edge of a square pot can create a natural barrier to the flame, both accepting and deflecting it to create a protected area and point of contrast. The flame may also move over an edge, creating a much different mark than that of a round form.

Plates sit flat on the shelf and are often bypassed by direct flame. Stacking plates on wads or shells may create higher flame velocity between them, which can result in interesting marks such as dots or flame trails. The height at which a shelf sits above a plate also plays a role in the velocity of flame reaching that plate as well as the amount of soda affecting its surface. In an effort to create a form with the ample flat surface area of a plate but capture more of the flame directly, I began to construct envelope vases, which are essentially two plates, stacked on end and attached on three sides.

These particular vases record the path of the flame on two different sides that are typically contrasting because the flame is not able to wrap around the piece.

Planning and Placement

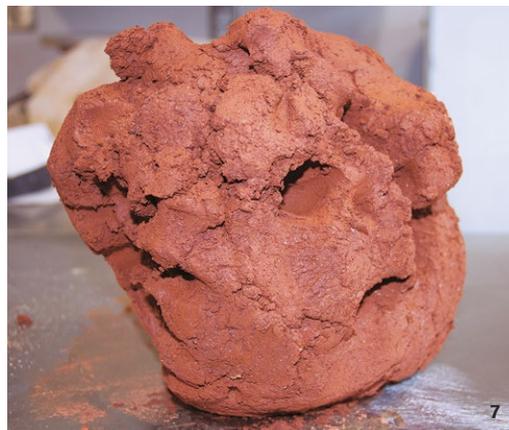
The placement of each piece in the kiln has a dramatic impact on the overall surface. Prior to making a body of work, I'll draw each piece that will be in the firing. Forms will also be drawn next to one another as well as all of the possible configurations of pots on each shelf. The idea is to anticipate the marks that will be left on each piece and how the flame will be directed through the kiln. Proximity of pieces to one another, to the shelves, and to the walls will have an impact on their surfaces. A pot that is close to (or touching) a shelf, wall, or other pot will have a more pronounced and protected mark. The further pieces are spaced out, the softer and more subtle the variation of color and marks will become. The difference in results caused by leaving between 1 and 4 mm of space between pieces may be substantial.

Placing two round pots next to each other on a kiln shelf will create a much different flame path (and different mark) than placing

two angular pots near each other; the same goes for pairing a round and angular pot. Two envelope vases placed next to each other face to face will create a highly protected area between them. Wads or shells can also be placed between pots to create marks and points of flame constriction. I use a wadding recipe that is meant to be porous and create darker marks on the piece. The shape of the wad also plays a role. Think about round and angular wads and what marks they might leave.

Flow of the Flames

It's also important to understand how the flame moves through the specific kiln being fired. This can be done by pulling peep bricks and watching the flame throughout the firing. It has helped me to draw diagrams of the kiln with winding arrows pointing in the different directions that the flame is moving. This is easily accomplished and really helps when loading the kiln and trying to anticipate the way that the flame is flowing. Pots and bricks can be used to direct the flame to different areas of the kiln or toward other pots. The envelope vases work great for this.





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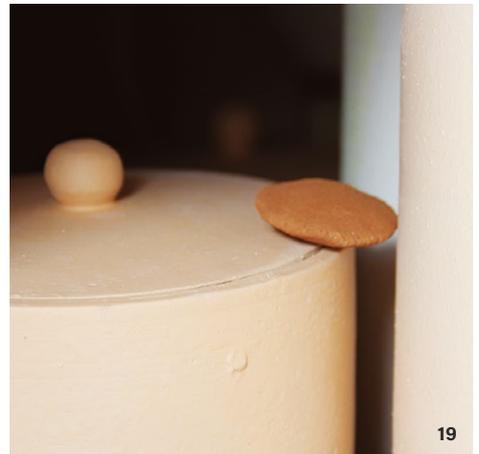
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5 Bisque-fired work is laid out and decisions are made on which pieces will make it into the firing and how they will be paired with one another. **6** Wadding materials prior to being mixed by hand. **7** Iron-rich wadding mixed to a clay-like consistency. **8** Pre-made wadding discs that are positioned in between pots. **9** Wadding disks of various shapes and sizes. **10** Coils of high-alumina wadding cut and ready to be positioned between posts and shelves. In a soda kiln, posts and shelves must be separated with wadding or the added flux from the soda could cause them to fuse together. **11, 12** Pots are pre-wadded and then covered with plastic to keep the wads from drying out before placing the pieces on a shelf. **13** Bisque-fired pots ready for the kiln. **14** Stuart Gair loading the kiln. **15–19** The back stack is loaded first. Pots are positioned to create good airflow and an opportunity for the soda and flame to reach each piece. Iron-rich wads are also placed in between pieces in anticipation of the path of the flame in order to create particular protected marks. High-alumina wadding is placed between posts and shelves.



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20 Vase, 7 in. (18 cm) in length, soda-fired stoneware. **21** Teapot, 9 in. (23 cm) in length, soda-fired stoneware. **22** Lidded pitcher, 8 in. (20 cm) in length, soda-fired stoneware. **23** Oval dish, 6 in. (15 cm) in length, soda-fired stoneware. **24** Box, 3 in. (8 cm) in height, soda-fired stoneware. **25** Teapot, 7 in. (18 cm) in length, soda-fired stoneware.

Typically, I place pots in such a way that the flame and soda can reach all of the pots. On each shelf, taller pots are positioned in the middle and they taper in size toward the shelf's edge where the smallest pots are placed, allowing the flame to reach pots that are normally hidden or blocked. I've also found that this approach to stacking helps the flame move more freely through the chamber, making it easier to make adjustments in order to fire the kiln more evenly top to bottom, particularly earlier in the firing.

I like comparing the flow of the flame to that of a river. The main flame flows from the burners, through the chamber, and eventually out the flue. In addition to that primary flame, there are also a number of smaller paths, like tributaries, that flow to different parts of the kiln and may create hot and cold pockets, which are helpful to identify. Like a river, constricted areas create a higher flow velocity and more dramatic marks on the wares than areas where the flow is open and slow.

Materials and Firing the Kiln

Materials are important to consider before firing a soda kiln. Using clays or slips that will accept more soda than others results in shiny surfaces. Conversely, a matte surface comes from the use of materials that are more refractory. Some materials encourage flashing while others are more uniform, subdued, and muted. Lighter clays and slips tend to yield a spectrum of lighter and brighter colors such

as pinks, yellows, oranges, and grays. Clays with more iron may produce darker hues of brown, navy, orange, maroon, or gray. The key here is testing and always having tests in each firing. Currently, I'm exploring applying light slips over dark clays and dark slips over light clays to achieve more depth in the surface. Once you become more familiar with the kiln you're firing, you may begin to understand what slips and glazes work best in particular areas of the kiln. I typically have around five different slips, glazes, and clays placed in different zones of the kiln where they are most suitable.

Finally, the firing of the kiln is an important factor that can dramatically alter the outcome of the surface and color of the wares inside. Firing in a reduced atmosphere (more fuel than air) versus an oxidized atmosphere may be the difference between a clay coming out orange or gray. It may also be the difference between a glaze turning out red or blue. I typically fire the kiln in both oxidation and reduction cycles throughout the firing. Reducing the kiln early affects the color of the clays I use, and reducing the kiln late in the firing affects the color of my glazes.

The forefront of my research has been the importance of reduction and oxidation cycles at the end of the firing, as well as oxidation cooling. While spraying a combination of dissolved soda ash and water at the end of the firing, I simultaneously experiment with oxidation and reduction cycles, almost like the kiln is inhaling and exhaling. After the soda mixture is sprayed into the kiln as quickly as possible and



24



25

the oxidation/reduction cycles are complete, the kiln is turned off and quickly cooled in a process I call oxidation cooling, an idea that originated from pulling draw rings from the kiln. In order to introduce as much oxygen as quickly as possible into the kiln, all of the peep bricks are opened, fans are left on, and the door is cracked opened, if possible, and an additional fan is directed toward the stack. This fast re-oxidation brings out a much greater range of color and subtleties that would otherwise be lost. Please don't try this method unless you have taken all of the safety precautions and are using a kiln in a fireproof setting.

Soda firing continues to keep my full attention and is really exciting to me because it's a relatively new approach (originating in the 1970s) to firing ceramics and it seems like artists who soda fire are discovering new techniques and experiments to try every day.

the author *Stuart Gair has a BA in history from Ohio University, and completed the M.Ed. program at John Carroll University in Ohio, along with the post-baccalaureate programs at Ohio University and the University of Nebraska-Lincoln. He earned an MFA in ceramics from the University of Nebraska-Lincoln. He was a resident artist at the Archie Bray Foundation for the Ceramic Arts in Helena, Montana, and Watershed Center for the Ceramic Arts in Newcastle, Maine. To learn more, visit <http://stuartgair.com>.*

STUART GAIR'S KILN LOG

Cones used in cone packs (and placed in this order):

012, 011, 010, 09,
1, 5, 7, 9, 10, 11

Soda mix: Combine $\frac{3}{4}$ pounds soda ash and 4 gallons of water. Spray mixture into the kiln at the end of the firing using a garden sprayer that has a metal wand (the heat would melt a plastic wand).

Day 1:

- 12:00 pm** start pilots, damper at 4 inches
- 1:00 pm** turn burner 1 on as low as possible
- 2:00 pm** turn burner 2 on as low as possible
- 5:00 pm** turn burner 1 up to 0.25 psi, open air until flame turns blue
- 6:00 pm** turn burner 2 up to 0.25 psi, open air until flame turns blue
- 9:00 pm** turn burner 1 up to 1 psi, open air until flame turns blue
- 10:00 pm** turn burner 2 up to 1 psi, open air until flame turns blue, maintain these settings overnight

Day 2:

- 7:00 am** kiln at dull red heat, turn both burners up to 2 psi
- 8:30 am** kiln at red heat, cone 012 is starting to bend
- 9:00 am** cone 010 almost flat, put the kiln into body reduction: close damper until there is light back pressure coming out of ports; there should be a faint smell of gas, and a slower, quieter, orange flame
- 9:45 am** take kiln out of body reduction, pull damper back out to 4 inches
- 10:30 am** both burners up to 3 psi, adjust air until flame turns blue (may need to pull damper a bit here to achieve blue flame), there's very light back pressure out of ports (climbing in reduction), leave the settings as is
- 2:00 pm** cone 5 is down top and bottom
- 3:00 pm** cone 7 is down top and bottom
- 5:00 pm** cone 9 is soft top and bottom
- 5:30 pm** turn both burners up to 3.5 psi, no adjustment with air, cone 9 is moving
- 6:00 pm** cone 9 is down, 10 is soft
- 7:00 pm** cone 10 is halfway down, put kiln into reduction, push damper in to 3 inches (or until you see back pressure coming out of the ports), there's a faint smell of gas, and a slower, quieter, orange flame
- 7:15 pm** spray soda and water solution into the kiln: spray a third of the solution into ports, then pull damper out to 5 inches to reoxidize the kiln
- 7:30 pm** push damper in to 3 inches, then spray another third of soda solution in through ports, then pull damper back out to 5 inches to reoxidize the kiln
- 7:45 pm** push damper in to 3 inches, spray the rest of the soda solution, then pull damper out to 5 inch to reoxidize
- 8:00 pm** damper back in to 3 inches so it is reducing again
- 8:15 pm** pull damper out to 3½ inches
- 8:30 pm** pull damper out to 4 inches
- 8:45 pm** pull damper out to 4½ inches
- 9:00 pm** oxidation cooling: pull the damper out all the way, turn off gas, leave fans on, pull out all peep bricks, crack door open if possible
- 9:30 pm** close damper, fans off, put the peep bricks back in, close the door, and go home

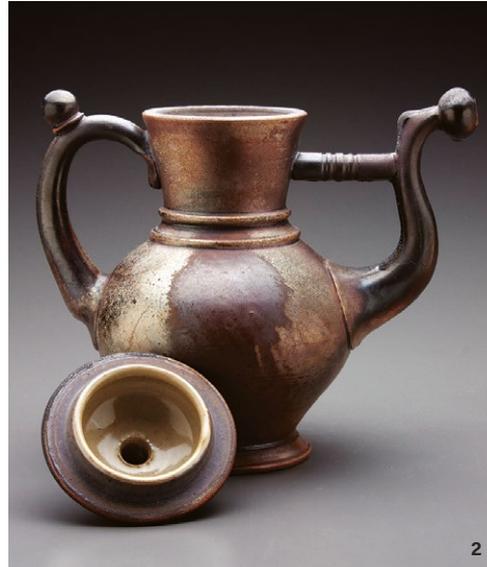
WOOD-FIRED SURFACES

by Seth Green

Seth Green shares recipes for slips and glazes he uses to create the metallic and variable surfaces on his wood-fired vessels.



1



2



3

1 *Bottle with Rattling Stopper*, 14 in. (36 cm) in height, stoneware Laterite Slip, Dever's Shino on vessel interior and bottom of stopper, wood fired to cone 10, reduction cooled, 2019. **2** *Teapot*, 8 in. (20 cm) in length, stoneware, Redart Slip, PV Liner Glaze on interior (see lid interior), wood fired, reduction cooled. **3** *Domical Jar with Buttress Handles*, 12 in. (30 cm) in height, stoneware, Laterite Slip, wood fired to cone 11, reduction cooled, 2019. **4** *Lidded pitcher*, 10 in. (25 cm) in height, stoneware, Redart Slip, wood fired to cone 11, reduction cooled, 2020.

DEVER'S SHINO (1)

Cone 10–11 Reduction/Wood

Soda Ash	4.21 %
Spodumene	15.79
Nepheline Syenite	52.63
Soda Feldspar	6.32
Cedar Heights Redart	7.37
EPK Kaolin	9.47
OM 4 Ball Clay	4.21
	<hr/> 100.00 %

For the soda feldspar, I suggest using Minspar 200 feldspar. Mix to a slightly thick consistency (like heavy cream) and apply to bisqueware via dipping, pouring, or spraying.

PV LINER GLAZE (2)

Cone 10–11 Reduction/Wood/Soda

Gerstley Borate	50 %
Plastic Vitrox Clay	50
	<hr/> 100 %

Mix to a slightly thick consistency (like heavy cream) and apply to bisqueware via dipping, pouring, or spraying.

LATERITE SLIP (1, 3)

Cone 10–11 Wood

Laterite	100%
--------------------	------

To create this slip, use as much laterite as needed to make an appropriate-sized batch and add enough water to create a thin slip. Apply this to bisqueware via dipping, pouring, spraying, or brushing. Works best in wood firings.

REDART SLIP (2, 4)

Cone 10–11 Wood

Cedar Heights Redart	100%
--------------------------------	------

To create this slip, add as much Cedar Heights Redart as needed to make an appropriate-sized batch and add enough water to create a thin slip. Apply this to bisqueware via dipping, pouring, spraying, or brushing. Works best in wood firings.

These glazes and slips are fired in a train-style wood kiln using mixed hardwoods. Firing duration and temperature: 27-hour firing to cone 10–11, cooled in reduction for roughly 6 hours (stoking 4 small to medium sticks of side-stoke wood in the primary air and side-stoke ports about every 15 minutes until the temperature reached 1500°F (816°C) in the front of the kiln and 1600°F (871°C) in the back of the kiln).



4

EASY KILN LOADING

by Mitch Pilkington

I love creating round, full-bellied vessels and try to make them as big as possible. These large forms can be difficult to lower into the kiln when they are dry, fragile greenware. This challenge is compounded by the fact that my old top-loader kiln isn't very big, so there is often no room for my hands between the vessel and kiln wall.

My solution to this problem is to lower the vessel into the kiln using a silk scarf. Place the vessel in the middle of a large silk square (1) and gather up each corner and grip tightly. Lower the vessel gently into the kiln (2), then let go of one side of the scarf and let it slip down the side of the vessel. Very carefully, pull on the silk scarf while gently easing the pot off of it (3). Try to capture as much of the silk scarf as possible by wiggling the scarf and vessel. Do not rush this process, you will get there (4)!

I have been using the same scarf to load large pots into my kiln for five years now, and although it is easier with someone else's help, I have managed this process by myself quite successfully. I use silk as it is not bulky, easily slips out and, if it doesn't work out and it can't be retrieved, then it can be abandoned to the kiln gods as it is a natural fiber and won't damage the kiln when it burns out during the firing.



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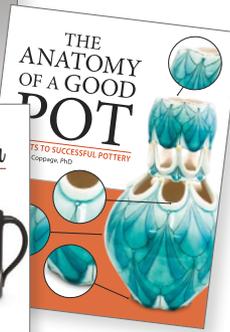
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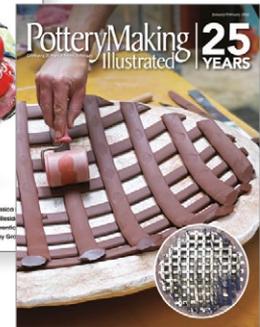
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