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Interactive Relationships: An Exploration of Ceramic Surface and Form

Katie Fee

A Thesis submitted in partial fulfillment of the requirement for the degree of Bachelor of Arts in the Department of Art & Art History from the College of William & Mary

Professor Mike Jabbur

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Conceptual Background

In any given vessel, an inherent web of relationships exists between form, surface, and prescribed function. Each of these components can be considered independently, but in reality they directly inform and influence one another. In my thesis project, the form and surface of a pot are examined through process as each piece is made. Prescribed function of a pot develops simultaneously from the conceptual idea that precedes production and from the expectations for the finished pot.

It is often said that form follows function, but I believe that pottery’s function is enhanced by form. The form of a vessel can encourage the nature of a user’s utilization in a specific direction. With all my pots, my aim is to create engaging form, encouraging the user to investigate and experiment with the piece. To do so, I distinguish between vessel’s interior and exterior by the treatment and energy used in their making. For example, a cup starts as a mound of clay centered on a wheel from which a cylinder is pulled and stretched into shape. The cylinder is then cut with clay tools such as textured wire, metal carving tools, and knives. Each mark is made in a continuous, swift motion. This changes the cylinder’s wall thickness to vary from thick to thin, as the exterior has points, planes, ridgelines, and overhangs. Next, the form is gently pushed from the inside as the wheel is spinning, using a wet sponge and smooth rubber rib. These tools stretch a symmetrical curve, defining the volume of the form. The finished exterior recalls a raw landscape that becomes an interactive playground for the hand. The interior, in contrast, is a smooth, uniform void ready to be filled by liquid or food. It is sturdy and clean enough for lips to meet it with comfort.
Moreover, the finished surface, which is unequivocally entwined into the form, can build up or contradict the character of a vessel. J.J. Gibson theorized, “It is at the surface of an object that most of the action of vision takes place.” The shapes, edges, and planes that make up the form comprise its surface, along with the finished color and reflectivity.\(^1\) However, the standard process of making pottery is divided into different parts by firing, so that finished surface and three-dimensional form are often considered separately. It is my job as the maker to unify the two to create a finished pot.

By exploring and refining the relationship between form and surface of a vessel, I hope to enhance the relationship between that vessel and its utility. I handle the interior and exterior of a vessel’s surface in a similar way to its form. The interior of a cup has a level edge where it meets the rim of the exterior. The rim of the cup acts as a border between the interior and exterior. As a result, it is defined by a clean edge of glazed surface which meets the top of the inner rim. The glaze used for the interior is consistent and clean when it comes out of the kiln. It’s texture, emphasizing the interior form, is smooth and polished. On the contrary, the exterior is dipped in a reactive glaze, sprayed with flashing slip\(^2\), or left unglazed altogether. The resulting surface is a series of organic, natural transitions in texture and color, including dull, vibrant, matte, and glossy. The soda or wood-fired surface enhances the expressive sculpted structure of the exterior form so that the two build on one another. In each new body of work, revisions are made at first to either the interior or exterior of a piece. Modification in one part demands

\(^1\) J.J. Gibson, *An Ecological Approach To Visual Perception* (Boston, Houghton Mifflin: 1979)

\(^2\) “Coating pots with high alumina and kaolin slips gives them a more soda resistant surface... Such slips act as effective barriers between the clay body and soda vapor, limiting glaze formation on heavily exposed areas while causing colorful flashing in lightly glazed areas.”

updates from the other to achieve a cohesive product. The discourse between interior and exterior drives my making cycle forward.

My process of making pots is informed by the parameters for functional pottery. I explore the interplay of surface, form, interior, and exterior in a pot and afterwards look back to clean and refine the finished piece. Functional pots should endure repeated touch, engagement, heat, and cold. My pots are intended to engage the user. The process of their construction, in which I emphasize sculptural qualities, comprehensive balance, and interior and exterior, is intended to create a tactile, exploratory experience. My hope for these pots is that they spark curious, celebratory interaction.

The pots in this body of work are often inspired by the monumental action of geologic formations. The certainty and confidence of formative marks in physical geography set a standard for how I approach working with clay. When I see a natural landscape, I feel a sense of wonder for the grand scale of time it encapsulates, and excitement for the forces that shaped it. I hope to achieve a similar sense of epic motion that vast surfaces of the earth represent in my pots. For example, sustained force of rushing water across a rock face mottles and deepens the rock’s form over time, developing a rich, subtle surface. Varied minerals in the rock weather differently, reworking the shape of a rock and shifting its texture and color. I am also interested in the effect that shifting scale has on form. When applied to a pot, I believe that the forms of geographic surfaces can facilitate thoughtful, interactive experiences for the user.

**The Project**

At the outset of this project, I pursued smooth-surface exteriors on pots, which act as a blank canvas in the kiln, so that the process of firing paints the surface. Rims and
feet trap smoky gray carbon on their edges, pockmarks of soda vapor organically dissipate, and smooth exterior flashes where it is bombarded with direct flame (fig 1). This process interests me because it puts a lot of emphasis on the kiln as a collaborating tool for the artist. If given the right queues, the kiln can paint an amazing variety of colors and textures onto a form’s surface.

However, these results did not satisfy my expectations for engaging, interactive pots, so I began to explore three-dimensional patterns. That exploration of pattern informed my process of cutting away angled facets from the exterior of a cylinder and stretching out the textured wall from the inside. The visual appeal and tactile opportunity that I perceived in this technique made me eager to pursue more pots like this (fig. 2). I think the visual movement on the surface promotes tactile interaction. The interplay of ridgelines and sunken dunes act as entry points for the hand as they move upward and around, twisting the form. A hand can sink into the mottled form, and find its best fitting nook. Additionally, lips can search for a new place to drink from the rim for each sip. Glaze applied to the exterior breaks along the textured ridgelines and transitions in color and complexity with the texture of the surface (fig. 2). The treatment of the surface enhances the form.

At this stage of my project, emphasis was placed on reactive glazes for my pots as I used more and more glaze in each firing. Since the glaze palette available did not match my ideal surface, I sought out methods to customize my surfaces. Using the glaze lab and basic glaze chemistry, I began testing new glaze bases and colorants. I compared results of different colorants and oxides in each glaze base, taking into account placement in the kiln, as a means to decide which surfaces contribute better to sculpted patterns in
the pot. The interior and exterior surfaces can balance one another in their color, intensity, and texture. Initially, the interior was monochrome and simple, while the exterior was variable in brightness, color, and complexity. Now, interiors are smooth textured, bright, and uniform, while exteriors are matte and variable in tone and texture. Sometimes the exterior is not glazed at all, but instead has a flashing slip or no application on a reactive clay body. The exterior surface organically shifts from one tone to another, while the interior feels consistent. The specific color of either does not satisfy me so much as the reactivity of the glaze or slip.

The physical form changed in tandem with its surface. As the interplay between faceted planes and edges developed with each pot, the relationships between facets, ridges, and tool marks became more varied. By designing pots before executing them and shifting between three-dimensional object and two-dimensional image, I was able to accelerate the process of discovering and exploring combinations of parts. I use printmaking as a means to explore finished pots and inform my ideas and blueprints of future vessels. Translating three-dimensional objects into two-dimensional images is an act of abstraction. The abstraction that etching imposes on presentation affords me a new window through which to see composition of form. Having a dialogue between graphic renderings and actual objects opens up a world of explorations and combinations within each form. As the project has gone on, my three-dimensional and two-dimensional works have developed in concert with one another. It is easier for me to explore a wide variety of possibilities in the physical process of making a pot if these possibilities have already been refined on paper. When it felt as though I had hit a dead end in the faceted
forms of pots, mapping and drawing them revealed a new world of techniques and marks to the process.

Since the steps of making each pot focus on cutting and shaping with wire, I began to wonder how wire inclusions in clay might enhance the work (fig. 3). Initially it seemed that the wire would relate to the tone of the pot—emphasizing an industrial, rugged character. However, as I worked with wire I found that the juxtaposition of shifting, momentous planes of clay against contorted frozen lines of wire revealed a contrast between the materiality of clay and wire (fig. 4). Clay is slow, plastic, and persuadable in its form. Wire can crinkle and twist, but can only be manipulated once before its quality starts to deteriorate. As it stands, the relationship between wire inclusion and faceted clay vessel in my work is still developing.

During winter break, I was afforded the opportunity to live as a resident artist at Penland School of Arts and Crafts. The residency shifted my work cycle dramatically. Rather than making and firing groups of pots bi-weekly, as I had been doing before, I made forms for three weeks, then glazed and fired during the fourth. A three-week making period allowed me to dig into working with clay, and explore marks and cuts on pots without as much concern for a deadline. Due to this period of extended exploration, my forms felt more cohesive and resolved. When it came time to fire the body of work, pots were glazed in a decisive, indiscriminate way: interiors with dependable glaze, exteriors mostly raw clay.

The interaction of different components—glaze, raw clay, sculpted exterior, and stable interior—stood out in the body of pots I made at Penland (figs 5-10). However, few of them incorporate multiple parts into one form, and many of those pots have fragile
edges and sharp points. Following that experience, I aimed to build on the main successes and shortcomings of those pots. I have attempted to enhance the palette of glaze and raw surface, retain a visually stimulating three-dimensional form, and complete a resolved complex functional form.

The exploration of making bowls and cups is striking because the exterior’s composition is created in one fluid process, and it directly becomes a tactile experience for the hand. However, they present a very different set of challenges than multi-part compositions. Since I had grown comfortable navigating the steps to making cups and bowls, switching to complex pots seemed like a challenging transition. Vessels such as jars and teapots demand more preparation and extended focus. As multiple parts are attached to create a cohesive form, new relationships between those parts grow, and a much wider series of questions beg to be answered. The sculpted exterior of the main body must relate to its parts. The spout of a teapot has to meet the body of the vessel at a specific point, and at a specific angle. No single lid is the perfect resolution to complete its jar; the lid helps to define the boundaries of the form, possibly extending the interior volume with a convex cap lid, or truncating it with a concave inset lid. Deciding between parts to create a whole is somewhat situational, depending on the scale and markings of each individual part and the proportions of the whole. There is no one resolution to any of these decisions.

Parts and wholes build upon one another in the same way that the object and sketch drive each other. Complex forms provide a new lens through which to perceive the body of work. Relationships seen between small moments in complex pots, such as the resting angle of a lid in its gallery or the joining ridgeline of two different planes
across a surface, inform the composition and relationship of parts in a cup, bowl, or plate. Through this exploration, the facets on forms are more focused on carving eloquent, loose sheets about a round form. The kinks in wire record the undulations of movement as wire textures the surface. The final pots I made in the project include more assembled parts, each with a more quietly textured surface.

**Conclusion**

This body of work is an investigation of relationships. Surface and form are indivisible components of a vessel, and their interplay informs an individual’s perception of the whole. Through the process of exploring the relationship of surface and form, inquiries into other relationships arise. Textures, both rough and smooth, juxtapose one another. The interior and exterior of a pot define and limit one another. The comparison of variable, carved exterior to uniform, geometric interior encourages two different types of interaction: exploration of an unfamiliar surface and acceptance of a uniform one. Glossy glaze and raw clay each have a place on the same vessel. Sharp rims and smooth, vast planes must resolve into a tactile clay landscape. Spout, lid, and handle can combine into the body of a vessel with variable proportions and treated surfaces. The interaction of parts in each relationship encourages the viewer to interact with the work, instigating a relationship between object and agent. These vessels show how opposing elements in binary relationships can engage and elevate one another. The interplay of various relationships supplements that engagement. Given time, the opposing elements that make up these relationships will adjust in concert with one another. Some may deepen while others dissipate. My making cycle simultaneously drives and is driven by this perpetually shifting balance.


Works Cited


Figure 1. Fee, Katie. 2015. Soda fired porcelain. Flashing slip and green celadon glaze.
Figure 2. Fee, Katie. 2015. Soda Fired Porcelain. Yellow salt and celadon glaze.

Figure 3. Fee, Katie. 2015. Soda fired stoneware, nichrome wire inclusions.
figure 4. Fee, Katie. Wood fired stoneware, Nichrome wire inclusion.

figure 5. Fee, Katie. Wood fired stoneware.
figure 6. Fee, Katie. wood fired stoneware.

figure 7. Fee, Katie. wood fired stoneware.
figure 8. Fee, Katie. wood fired stoneware.
figure 10. Fee, Katie. Wood-fired stoneware.
Figure 13. Fee, Katie. 2016. soda fired stoneware.

Figure 14. Fee, Katie. 2016. soda fired stoneware with kiln wash.