



Of Macro and Micro

The Weavings of Form and Chemistry in Ceramics



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Artist Statement

If you look beyond just a finished ceramic bowl, cup or vase, there are some complex calculations, testing, experimenting and techniques one must attempt to control in order to produce the results desired. Ultimately, it is not easy and there are many factors working against you that you must master. I have been fascinated with these factors specifically on porcelain clay.

The almost pure white quality of the clay when high fired is a very attractive quality of porcelain, and adds an extra but fun obstacle when throwing due to the fragile make-up of the clay. I have been trying out different forms I can make in an even progression of shape; seeing how far I can push the clay. Flushing the clay wide and then pulling it back in to create a vessel has become a skill and a challenge during this experimentation. It has become a fun game of how far can the clay go and I have been challenging the traditional pottery forms by creating pieces that are fully enclosed, stepping away from functional pieces. As for glazing techniques, I really enjoy the movement the glazes can create, for while they are being fired, they are molten and melt onto the form, and to have this movement be captured in a finished piece is always interesting. My experimentation with this effect through different concentrations of oxides in the glazes was demonstrated well in this series.

Overall, clay is a medium where I can let my mind go blank and let my hands and my sense of touch completely take over during the process. The spin of the wheel and the glide of the clay through my hands is just a calming experience that I ultimately enjoy.

Process

* All pieces made on a potter's wheel.

Firstly, I created pottery pieces to demonstrate the vocabulary of the glazes by creating 100 test cups so I could see what type of results I would get. Secondly, I created another set of 100 forms, this time altering each piece in their shape to make the ultimate display even more interesting. Overall, in the way in which these 100 pieces are finally displayed, the viewer will be able to see a visual progression of color of the glazes, as well as a progression of shape and form.

Materials + Components

- 300 lbs. of Coleman Porcelain Clay (200 pieces, 1.5lbs each for each piece)
- Potter's Wheel
- 18 2.5 Gallon Buckets
- Materials for Woo Blue Base Glaze
- Materials for Maybe Red Base Glaze
- Oxides - Rutile, Red Iron Oxide and Copper Carbonate
- Electric Kiln for Bisque Fire
- High-Fire Cone 10 Kiln for Glaze Fire
- Shelving for Final Display

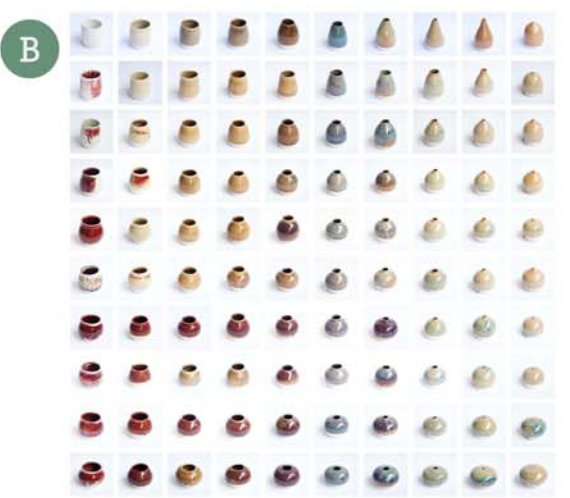
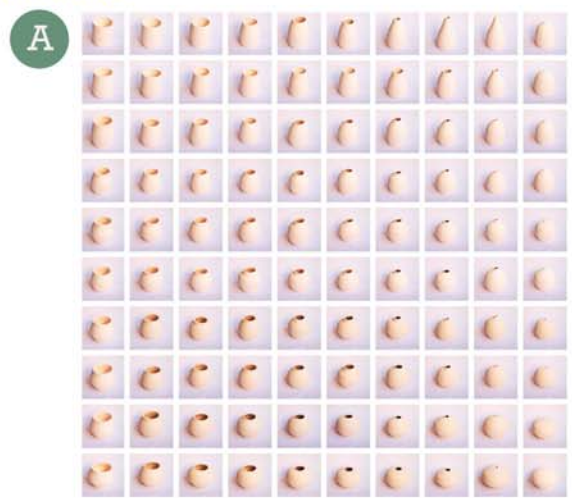
The Matrix

		A - J Woo Blue Base Glaze - Oxides; Rutile + Red Iron Oxide Forms change in height and width of neck of bottle																																																																																									
		Percent Oxide				3%				1.5%				2%				2.5%				4%				5%				5.25%				7%				8%																																																					
		Base Form + no glaze		B i		C i		D i		E i		F i		G i		H i		I i		J i		B ii		C ii		D ii		E ii		F ii		G ii		H ii		I ii		J ii																																																					
I - X Maybe Red Base Glaze - Copper Carbonate Forms change in width and curvature of base	1%	A ii	B ii	C ii	D ii	E ii	F ii	G ii	H ii	I ii	J ii	A iii	B iii	C iii	D iii	E iii	F iii	G iii	H iii	I iii	J iii	A iv	B iv	C iv	D iv	E iv	F iv	G iv	H iv	I iv	J iv	A v	B v	C v	D v	E v	F v	G v	H v	I v	J v	A vi	B vi	C vi	D vi	E vi	F vi	G vi	H vi	I vi	J vi	A vii	B vii	C vii	D vii	E vii	F vii	G vii	H vii	I vii	J vii	A viii	B viii	C viii	D viii	E viii	F viii	G viii	H viii	I viii	J viii	A ix	B ix	C ix	D ix	E ix	F ix	G ix	H ix	I ix	J ix	A x	B x	C x	D x	E x	F x	G x	H x	I x	J x
	1.2%	A - J Pieces demonstrate the different concentrations of Woo Blue Oxides. Forms progress from wide opening to narrow opening.																																																																																									
	1.4%	I - X Pieces demonstrate the different concentrations of Maybe Red oxide on top of Woo Blue. Pieces progress from a straight wall to a very round wall/vessel.																																																																																									



1. My workspace in the clay studio.
2. My matrix drawn out at my workspace.
3. A bag of the porcelain clay I used.
4. The electric bisque kiln I used.
5. The high-fire cone 10 glaze kiln I used.
6. Measuring out materials for the glaze calculations.
7. All my Woo Blue glaze buckets lined up while I make them.
8. One of the Maybe Red glaze buckets.
9. All 18 different glazes.
10. 100 test cups before they have been glazed.
11. Some of my test cups still in the kiln after the glaze fire.
12. A detail of a glazed test cup.
13. Some greenware from the final set of 100.
14. Some of the final set of 100 after they have been bisque fired.
15. Opening the final glaze kiln.

Conclusion



A. These are all 100 of the final pieces as bisque. Here you can easily see the form progression. I started at the top left corner with a cylinder form. Then as the pieces move to the right in the rows the opening gets smaller and smaller. Finally, as the pieces go down the columns the pieces become more round and curved.

B. These are all 100 of the final pieces with glaze and are completely finished. As the pieces move right across the rows the concentration of oxides in the Woo Blue base glaze increase. Next, as the pieces go down the columns the concentration of oxides in the Maybe Red base glaze increase. I glazed the pieces with Woo Blue first and then applied the Maybe Red on top, so you are seeing an overlap and those effects as well.