A Visual Sound

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A VISUAL SOUND

by

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The repetitive nature of my work allows me to divide the tactile experience of the creative process into a contemplative state. Repetition causes the body to move automatically, less aware of its surroundings; the recurrent contact of the hand with the form causes them to merge systematically. This is the point where the sculpture for me becomes conceptually complete. It is this harmonious balance between material and the physical process that I wish to reveal to the viewer.
ACKNOWLEDGMENTS

This thesis document is in dedication to my wife Viridiana Bogdany. Her selfless sacrifice of time to mother our beautiful son during my countless hours of absence has been the only way I have been able to accomplish this prestigious degree.
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CHAPTER 1: INTRODUCTION YEAR ONE

The objective of my research has been to expand beyond my undergraduate studies in the field of Ceramics. Being enabled by the MFA program to experiment with multiple materials has allowed me to broaden the scope of my work in ways that I once could only visualize. My intention is to successfully create sculpture that is appealing to the layman, as well as to an international art market. Moreover, I plan to create a culmination of my life’s interest in tangible works that have a connecting thematic quality that are unique in regards to form and concept. The following chapters will be separated by year, each contains two bodies of work that will be divided and noted to reveal the research taken place per semester. It is this research of form through medium that acts as a timeline of this work created over the past three years.

Semester 1

I began my research with a series of works that I called Ceramic Wave File Reproductions. When a sound is recorded into a computer, a visual image of the sound is created. The image that is created by such a sound is the inspiration for the forms I would produce for the duration of my graduate studies. The contours in the wave files are a mixture of geometric and organic shapes that are a visual reproduction of a sound recorded into a computer.
Because Ceramics was my area of specialization in my undergraduate studies, I decided to work with materials that were familiar to me during the first semester. I proceeded to create a variety of vertical forms that had similar characteristics to the black horizontal lines illustrated in Figure 1. The forms are wheel-thrown of handmade stoneware clay, bisque fired and glazed fired to cone 06 (Figure 2 - 4).
Figure 2: Form 1 (stoneware, glaze)
27” X 11”
Figure 3: Form 2 (stoneware, glaze)
23” X 6.5”
Figure 4: Form 3 (stoneware, glaze)
49.5” x 22”
To my dismay the majority of the handmade stoneware clay contained a contamination. This caused the forms to crater a few weeks after the glaze firing process. The stoneware clay body had been contaminated with plaster. During the firing process the shrinking clay contracts around the imbedded plaster, creating pressure. The pressure eventually releases through the surface of the form, creating pits or craters on the once smooth finished surface.

Figure 5: plaster contaminate
Unfortunately in my undergraduate studies this was a relatively common result when sharing a large studio space with multiple students. Beginning and advanced ceramic students share the same facilities, and at times misplace items, and/or elements will introduce themselves, usually in an undesirable way. It was at this point that I decided upon the use of prefabricated clay as the way I would pursue my works in the future. Although, I was frustrated with the end result of this process, the forms themselves were certainly the most interesting aspect of the exercise. To correct the crater situation I later filled the sculptures with Bondo to preserve the form’s integrity, and covered the surface with a two part tinted urethane (Figure 6, 7).
Figure 6: Form 2 (stoneware, glaze, bondo, tinted polyurethane)
Figure 7: Form 3 (stoneware, glaze, bondo, tinted polyurethane)
It was my frustration with the contaminated clay, combined with encouragement from faculty at final critiques to try alternative mediums, that I began semester two of year one with an alternative approach.

**Semester 2**

For semester two I decided to deviate from my original concept to introduce an unfamiliar medium. I decided to create a suspended totem constructed from paper, rebar, and chain. The paper forms were shaped via a plaster cast of my wife’s pregnant torso. To create these forms I had to fabricate my own paper. With the guidance and help of my mentor for this semester, Professor Larry Cooper, I created a papermaking machine. The machine was constructed from a utility sink that had a garbage disposal mounted at the base of the drain. The drain of the garbage disposal had a clear 3-inch flexible pipe that would be placed inside the sink, which in turn filled with fluid and created a recycling effect. To create the paper I used a combination of paper towels, water and methylcellulose placed inside the sink. I ran the mixture for approximately five minutes until the paper towels became a soft pulp consistency. I would then drain the pulp into a five-gallon bucket and strain off the water with a circular screen. I then formed the pulp in one-inch increments until I covered the entire surface of the plaster-molded torso. When the paper forms were dry I incorporated candy and cigarette filters on the paper sculptures. I then individually hand stitched 8 of the forms back to back to create a rosebud like form. I suspended the chain from a rafter and then threaded the chain through the center of the form. I then suspended 3’ sections of rebar through the links of the chain to hold up the paper
forms horizontally. I view this body of work as separate from my main area of focus in as much as this piece correlates mainly in medium experimentation and in the use of a vertical form.

Although this body of work was not accepted well by the majority of the M.F.A faculty, I truly enjoyed the end result. After completing this semester with harsh (seemingly one-sided) critiques, I was ready to return to my original research.
Figure 8: Paper Totem (paper, chain, rebar, candy, cigarette filters)

3’ x 11’
Figure 9: Paper Totem (Close up view: paper, chain, rebar, candy, cigarette filters)

3’ x 11'
Figure 10: Paper Totem (Full view: paper, chain, rebar, candy, cigarette filters)

3’ x 11’
CHAPTER 2: YEAR TWO

Semester 3

For this semester I decided to explore porcelain. I found the porcelain in its unfired state to be soft compared with clay bodies I had used in the past. In order to gain any height from the form on the wheel I had to throw the mass of clay thickly. The first piece I formed turned out flawlessly. I was so impressed by the purity of the bisque fired clay body that I decided to leave it unglazed (Figure 8). It was my ambition to create larger sculptures from the porcelain to gain a vertical sense of scale that I felt was lacking in the first form. I was able to create two larger forms during the course of the semester that were unfortunately damaged by cracking thorough the firing process. I found by increasing the scale of the forms that I incurred the imperfections in the porcelain body. My solution for the last two forms for the semester (Figure 9 and Figure 10) was to submerge the sculptures in a commercial grade roofing tar. I found this method to be an interesting addition to the series. The tar covered porcelain created a unique dynamic compared to the previous pristine white form. The downfall of the research for this semester was the amount of time I spent to create the forms. I found myself wondering if there was a more efficient way to create similar renderings faster.
Figure 11: Form 4 (porcelain)
42" x 8"
Figure 12: Form 5 (porcelain, tar)

56” x 9”
Figure 13: Form 6 (porcelain, tar)
54.5” x 9”
I felt that I should work on increasing my productivity. By creating a two-part mold from one of the previous semester forms (Figure 8), I could potentially repeatedly recast a form, increasing my body of work. This would also allow me to make several forms without the worry of the problematic fracturing porcelain. Furthermore, I would be able to try alternative materials such as silicone, wax, and fiberglass. For this experiment I decided to record my approach step by step with a digital camera. I sectioned the form in half with cardboard and masking tape, being certain not to damage the original form or deviate from its contour (Figure 14 - 20).
Figure 14: Mold (cardboard division line angle 1)
Figure 15: Mold (cardboard division line angle 2)
Figure 16: Mold (cardboard division line angle 3)
I had to remove the cardboard and tape to introduce a double-stick tape to minimize gaps between the form and the new cardboard barrier.
Figure 18: Mold (cardboard division line angle 5)

With the double stick tape in place I reintroduced the cardboard division to solidify the division barrier. Masking tape was used to remove the gaps between the double-stick tape, cardboard and the form.
Figure 19: Mold (cardboard division line angle 6)
Next, the form and the new barrier had to be treated with an anti-stick coating to keep the silicone from adhering to the porous, bisque-fired porcelain.
Figure 21: Mold (anti-stick coating)

Then I began to layer the form with a two-part vulcanizing silicone. Figures 19 to 29 each represent a new silicone layer.
Figure 22: Mold (layer 1)
Figure 23: Mold (layer 2)
Figure 24: Mold (layer 3)
Figure 25: Mold (layer 4)
Figure 26: Mold (layer 5)
I moved the mold to the ground to apply an all-purpose air vulcanizing tube silicone. This position would prevent the silicone from running; unfortunately it caused the form to pull away from the mold. I had to weigh down the top to straighten the form and use tape to hold the mold to the form (Figure 30, Figure 31).
Figure 28: Mold (layer 7)
Figure 29: Mold (layer 8)
Figure 31: Mold (layer 10)
Figure 32: Mold (layer 11)
Figure 33: Mold (shift)
A fiberglass backing was applied to straighten the mold.
Figure 35: Mold (fiberglass backing 1)
Figure 36: Mold (fiberglass backing 2)
I removed the cardboard backing from the opposite side of the mold (Figure 39). I then repeated the process of sealing and layering the opposite side with silicone and fiberglass in the same fashion in order to complete the two-part mold (Figure 39 – 48).

Figure 37: Mold (fiberglass backing 3)
Figure 38: Mold (cardboard side)
Figure 39: Mold (the other side)
Figure 40: Mold (silicon coat 1 side 2)
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Figure 42: Mold (silicon coat 3 side 2)
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Figure 46: Mold (silicon coat 7 side 2)
Figure 47: Mold (silicon coat 8 side 2)
After applying the ninth coat I backed the second side with fiberglass, drilled holes around the perimeter, and inserted screws and washers with wing nuts. By adding the screws before the mold was separated I insured the it would register correctly in the rejoin (Figure 49).
Figure 49: Mold (fiberglass and screws)
I inspected the mold for imperfections and found all was well. It was now time to cast. I decided to cast the form from paraffin. I reassembled the mold, melted the paraffin in an attempt to pour the form in sections, approximately a gallon at a time. I melted the paraffin inside an aluminum
container very slowly with a propane burner. The proper temperature to pour the paraffin is 170 degrees. I used a meat thermometer to gauge the desired temperature.
Figure 52: Mold (paraffin melt 2)
Figure 53: Mold (paraffin melt 3)
Figure 54: Mold (the pour 1)
Figure 55: Mold (the pour 2)
Figure 56: Mold (the pour 3)
As I poured the hot paraffin into the mold, it began to leak. I tried a number of solutions such as tightening the screws that hold the mold together, pinching the sides together with my fingers, and applying pieces of ice to cool the flow of the wax from its escape from the mold.
Figure 58: Mold (the pour 5)
Figure 59: Mold (the pour 6)
Figure 60: Mold (the pour 7)
After approximately 30 minutes, the leak of hot paraffin stopped, and I decided to take a break. When I returned the form had fallen over and most all of the wax was expelled from the mold opening. With much struggle and aggravation I stood the mold back up and refilled the mold. Once the wax cooled I removed the form from the mold. I noticed many problem areas. I decided to change my approach for the second cast attempt. I resolved to hoist the mold in suspension so that the weight of the wax as it filled the mold did not cause the form to fall or become deformed. I also inserted a paper tube inside the center of the mold to minimize the amount of
wax needed to create the completed form. The addition of alligator clips helped the mold to stay together and minimize leaking during the pouring process (figure 64).
Figure 63: Mold (second try 2)
Figure 64: Mold (second try 3)
Figure 65: Mold (second try 4)
Figure 66: Mold (second try 5)
Figure 67: Mold (second try: close up of pour 6)
Figure 68: Mold (second try 7)
To my dismay I inadvertently extracted the wax from the mold prematurely. Although the mold felt cool from the outside, the wax was still hot in the core. Almost immediately after extraction the form began to slump from the instability of the un-cooled wax. I realized that I would have to repeat the whole process again to attempt another form. It was at this point that I decided to stop.
taking photographs of the work in progress. Although I was unhappy with the outcome of my work for this semester, the results were well received in the final critique for this body of work. The collection of deformed pieces allowed me to advantageously view my work in its imperfect state. This critique caused me to realize that the imperfect form was something I was uncomfortable with.
CHAPTER 3: YEAR THREE

Semester 5

From the tribulations of the previous semester’s mold making experience, it was clear to me that I simply needed a new medium to gain the scale and productivity I felt I had been lacking in the past semesters. I decided to use polystyrene as my medium for this semester’s sculpture. I began with a 3’ x 6’ column section of polystyrene with a 1” diameter hole cut through the center of the 6’ length. I then used a 9’ threaded rod that I affixed to a 20” circular piece of plywood. Then I attached the plywood and threaded rod to a potter’s wheel. Also, I placed the polystyrene on the potter’s wheel threading the rod through the center of the column. To keep the form secure I placed another circular piece of plywood with a 1” hole in the center on the top of the column. I held the form in place by adding tension to a lock washer and nut at the top of the threaded rod, creating pressure on the polystyrene between the two pieces of wood. When the potter’s wheel was turned on it acted as a vertical lathe. The potter’s wheel has a speed control pedal that allows for a variety of settings. While the form was in motion I used an angle-grinder with a chain-saw blade attachment to create repetitious contours. I decided to document my activities with a video camera.
Figure 70: Polystyrene 1
Figure 71: Polystyrene 2
Figure 72: Polystyrene 3
Figure 73: Polystyrene 4
Figure 74: Polystyrene 5
Figure 75: Polystyrene 6
Figure 76: Polystyrene 7
Figure 77: Polystyrene 8
Figure 78: Polystyrene 9
Figure 79: Polystyrene 10
After making several passes with the grinder I decided that the form required extra height to create a more dominating scale. I laminated another 3’ x 4’ section to the top of the form, adjusting the rod with a 4’ extension.
Figure 81: Polystyrene 12
Figure 82: Polystyrene 13
Figure 83: Polystyrene 14
Figure 84: Polystyrene 15
Figure 85: Polystyrene 16
Figure 86: Polystyrene 17
Figure 87: Polystyrene 18
Once I sculpted the polystyrene, the form was soft and brittle. The soft form required a finishing coat to enable it to be handled or displayed. I decided to use a two-part polyurethane that I applied with a brush. I applied one gallon of polyurethane to the form. This application partly solidified the form but left the form looking shiny and wet.
Figure 89: Polystyrene (polyurethane) 20
The finishing coat of Polyurethane for the Polystyrene form was not enough to solidify the form effectively; it became clear to me that I was only half way in completing this work. I decided to apply fiberglass resin to the form to add desired strength. After experimenting with the resin I found that it would erode the polystyrene on contact. I created a barrier between the polystyrene and the resin with aluminum foil and spray glue (Figure 87- 89).

Figure 90: Polystyrene (polyurethane, spray-glue, foil) 1
Figure 91: Polystyrene (polyurethane, spray-glue, foil) 2
Figure 92: Polystyrene (polyurethane, spray-glue, foil) 3
Once the aluminum foil was in place I applied two gallons of fiberglass resin in 2-pint batches by brush beginning from the top down to the bottom.

Figure 93: Polystyrene (polyurethane, spray-glue, foil, resin) 4
Figure 94: Polystyrene (polyurethane, spray-glue, foil, resin, colorant) 5
After I applied the first gallon I introduced a red colorant to the mixture to increase the visibility of the resin. The colorant also added an interesting hue to the form.

Figure 95: Polystyrene (polyurethane, spray-glue, foil, resin, colorant) 6
Figure 96: Polystyrene (polyurethane, spray-glue, foil, resin, colorant)
Figure 97: Polystyrene (polyurethane, spray-glue, foil, resin, colorant) 8
After the form became rigid I applied bondo to the surface area of the form to level out the texture created by the drips and runs from the brush application of the resin.

Figure 98: Polystyrene (polyurethane, spray-glue, foil, resin, colorant, bondo) 9
The application of the bondo was tedious. I spent 9 hours applying the bondo to the first 3 bottom levels. I began to mix the bondo with more catalyst to decrease the drying time. The increased level of catalyst caused color of the bondo to turn from grey to pinkish red (Figure 96).

Figure 99: Polystyrene (polyurethane, spray-glue, foil, resin, colorant, bondo) 10
Figure 100: Polystyrene (polyurethane, spray-glue, foil, resin, colorant, bondo) 11
Figure 101: Polystyrene (polyurethane, spray-glue, foil, resin, colorant, bondo) 12
Figure 102: Polystyrene (polyurethane, spray-glue, foil, resin, colorant, bondo) 13
After coating the entire form with bondo I also sanded the form by hand. Besides smoothing the form, the hand sanding created a combination of textures that revealed the layers of treatment to the polystyrene form. Although it was not my original intention to display the form with the applied materials exposed, I realized the form as a completed sculpture.

On March 15, 2007 all of the MFA candidates installed their work in the fine arts gallery and scheduled their Thesis Defenses during the following days of the shows length (Figure 103-107).
Figure 103: MFA Thesis Exhibition 1
Figure 104: MFA Thesis Exhibition 2
Figure 105: MFA Thesis Exhibition 3
Figure 106: MFA Thesis Exhibition 4
Figure 107: MFA Thesis Exhibition 5
My Thesis Defense was scheduled for March 21,\textsuperscript{st} one day before the show’s opening night. I received my Thesis Committee signatures approximately one week later. The deadline for our PDF final upload was April 20\textsuperscript{th}, seemingly our final semester is coming to an end. We the students have also decided to create a MFA catalogue to present our work in a group format not limited to but in conjunction with our Thesis Exhibition. The catalogue titled \( M + F + A = 1 \) was presented to faculty and our next year MFA graduates for our final critique.
CHAPTER 4: CONCLUSION

At the end of my third year I felt that I had accomplished the goals I had set in place at the commencement of this program. I have acquired a foundation of knowledge by working with a variety of materials that has enabled my work to expand beyond its original vision. I am confident that my work has the ability to fit in the international market, as well as public art commissions. I have been mostly satisfied by the direction of this new program’s vision. It is my hope that the MFA program continues to broaden the scope of the student artist knowledge base, and will hold its focus upon current art and technology.