CERAMICS WITHOUT CLAY: AN EXPLORATION INTO POTENTIAL

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Investigating the behavior, function and appearance of ceramic materials has proven an enduring point of interest throughout my education. In learning about the vast range of the earth-yielded materials and their physical manifestations in states ranging from wet to dry to fired, I have found myself excited and challenged to seek out ways to expand their presentation. My attention has been repeatedly drawn to the class of ceramic materials that frequently get classified as “glaze ingredients.” Understanding the structural and visual qualities of these minerals and compounds was an interest whether I was making tableware, tiles, or sculpture.

For the purposes of this paper, I propose to deal expressly with the physical art-making considerations of material and process as they relate to my work in ceramics. By directing my focus as such, I hope to center my work on a concern that became evident to the art world upon the display of Marcel Duchamp’s *Fountain*: material equals content.

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CHAPTER 1

INTRODUCTION

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For the purposes of this paper, I propose to deal expressly with the physical art-making considerations of material and process as they relate to my work in ceramics. By directing my focus as such, I hope to center my work on a concern that became evident to the art world upon the display of Marcel Duchamp’s *Fountain*: material equals content.

The incongruity that the single most revolutionary art object of the 20th century was made out of a material so roundly marginalized in contemporary art speaks to the dual identity that clay possesses. In the case of *Fountain*, a deflocculated thixotropic kaolinitic casting slip wasn’t so much the base material of the piece as it was the ubiquitous urinal. Indeed, the artist’s own “ready made” label for the object implies a primacy that denies the existence of any means of production beyond the point in time when Duchamp found it suitable for his use.

The employment of ceramics in the creation of 20th century art has been notable if quizzical. Pablo Picasso, Claus Oldenberg, Judy Chicago, and Jeff Koons have all made roundly celebrated objects and environments with clay as the primary material, though the acknowledgment of their work has precious little to do with their knowledge of ceramics. These and other artists who have dabbled in clay subordinate the material to the image. They use ceramics as a semiotic signifier, concerning themselves almost wholly with the look of the object or environment upon its outcome. Manipulation of the material and control of the constructive process is consigned to commissioned craftsmen. None of the work has been left to chance, experimentation or growth. As a result, the materiality of the pieces is sterile and mute upon its display.

Such a division between craft and art needn't be the case. Gerhard Richter (painting), Jasper Johns (printmaking), and Richard Serra (metal working) have become acknowledged masters of their craft and giants in the art world. Their works are multidimensional meditations of process and effect that speak simultaneously to meticulous and expansive aspects of how people perceive sensation. An artist working in clay has yet to transcend that range of experience. Peter Voulkos and his students at the Otis Art Institute pioneered the first wave of ceramic's liberation from rigid traditions of form. But for all his revolutionary approaches to and understanding of the material, his world view was ultimately shaped much more by pottery than Abstract Expressionism. His Ice Buckets and Platters owe much more to Leach and Hamada than Kline and de Kooning.

Ceramics' intrinsic association with pottery is a double-edged sword. Those who couch their aesthetic in the vernacular of function or vessel clearly benefit millennia of

human experience that preceded them. Clay's essential nature is accessible and malleable, capable of physically or metaphorically containing anything from water to spirit. While sincere and earnest, those conceits travel an avenue that all too easily lends itself to lollipop sentiment and half-baked truism, disregarding contemporary conventions of artistic and academic criticism. This, then, is the downside of working with clay.

I am seeking a path with my work which eschews every conceivable reference to pottery in order to create a material-grounded aesthetic that demonstrates the breadth, complexity, and dynamism of ceramics. Beauty lies at that juncture. The work executed for this thesis is dependent on its ceramic nature for its identity and meaning. It will, however, be wholly distinguished from pottery in construction, function and display.

In foregrounding my work in material but distinguishing it from pottery, I seek to tread a path that will ultimately broaden the understanding, appreciation, and application of clay. I am searching for sculptural style that does more than ape the looks, techniques, and conventions of wood, metal and stone based work, leaving precious little clue to or reason for its ceramic foundation. In creating this new body of work, I hope to offer a new point of fusion between the object and the materials the processes which engendered it.

Statement of the Problem

The purpose of this research is to develop a body of work that presents new avenues for ceramic sculpture by employing unconventional materials in its creation. The common thread throughout the work will be the elimination of formed clay as a

foundation for the pieces. The objects will rely on metals, ceramic fiber and plaster as their cold-worked foundations. The addition of ceramic materials will accentuate texture, color and form in the final fired state.

Questions for Assessment

Three questions will be addressed in the completion of the project.

1. To what extent is the creation (through firing) of objects with metal, ceramic fiber, and plaster foundations a viable pursuit?
2. What combinations of ceramic materials can be employed to produce a visually engaging object?
3. Can this style of experimentation be used to expand the utilization of clay-related materials as a sculptural foundation?

Methodology

In attempting to answer these questions, I created a minimum of 12 works in which I used each of the three approaches outlined previously. At the end of the study, I assembled an exhibition, a slide portfolio, and descriptive report to substantiate the investigation.

CHAPTER 2

AN EXPLORATION INTO POTENTIAL

The work proposed for the thesis was conceived to be divided into three distinct classes: the metals, the plasters, and the ceramic fibers. The finished product, however, proved these distinctions to be frivolous and contrived. Between the physical demands the kiln placed on a piece's structural integrity and the visual demands the exhibition space placed on a piece's visual integrity, it became apparent that the three classes of materials would yield less than desirable results if employed in the exclusion of one another.

Combining them, however, is another story.

What one material lacks in either the structural or visual arena, another provided. Adding one to another proved to be the most viable working method, while supplementing the foundation materials with glassing compounds helped to both structurally stabilize the pieces and increase their visual allure.

Steel and lighter weight alloys can withstand the demands of high heat but yield little more than gnarled black lumps upon cooling. Fired with glasses and more complex glazes, however, they produce pieces that might be described as post-apocalyptic enameling.

Ceramic fiber is engineered to maintain its loose woven structure and insulating capacity at temperatures far in excess of those utilized by potters and ceramic sculptors. Undergirding it with a metal substructure and saturating it with soda ash, a glassing compound when melted, gives it a measure of structural integrity it had previously lacked.

The molecular bond that allow plaster to harden at room temperature splinter in the kiln, leaving the previous form in powder. Mixed with frit, an engineered compound that can be simply described as powdered glass, and applied over a metal substructure, a luscious hybrid material is formed that has unlimited sculptural potential.

Going beyond the unique and narrow consideration of a material's physical reaction to high temperatures are broader thematic concerns about the dialogue between man and nature. These issues consumed my attention during the fabrication of the work in the exhibition and can be refracted under many different lenses in meditating on the finished pieces.

All the work in the exhibition reflects some aspect of that elemental duality. Exploring such a spectrum of expressly experimental substances and processes consumed my attention with intricate balances of material and heat.

The issues these relationships predicate are ones of man-made and natural phenomena; geometric versus organic; control opposed to release. Rarely do the pieces settle on one pole or the other. Rather, the complexity of the processes that created them offers alternating glimpses of both man and nature, lending the work in the exhibition new avenues of visual and conceptual exploration.

Thought the materials have merged, the pieces have maintained a dominant material identity, which for the purposes of this paper, will allow me to analyze the work.

The Metals

Philadelphia, PA

Tupelo, MS

Wurtzboro, NY

Ft. Worth 24

Safety Dance (1)

Safety Dance (3)

Philadelphia,PA; Tupelo, MS and *Wurtzboro, NY* are a suite of independent pieces that represent the entry point for and the evolution of my working style. Metal, glass and found refractory material make up each of the compositions, decaying and merging together over the course of multiple firings. Created in the bottom of 55-gallon drums, the visual dynamism from the circular format reinforces the energy captured by the primal violence and beauty of the firing.

These pieces acquired their surface effects by over-firing layers of material, as a painter would build up layers of oil on canvas. At their foundations are the larger steel elements: a grill in *Philadelphia, PA* and angle iron in both *Tupelo, MS* and *Wurtzboro, NY*. A base of glass fuses the metal parts together and other material and debris were layered on top in subsequent firings to develop the piece's physicality and depth.

To the greatest degree of the metal-based work, these pieces retained their original man-made foundations, containing the organic activity within them. The geometric serves to frame the viewers' point of view, as would a window, rather than merging into a dialogue with nature. What results is a suite that reveals the materials and process behind its creation as few of the others in the exhibition do.

Ft. Worth 24 and the *Safety Dances* pieces reference man's relationship to the organic in a manner that is alternatingly concise and obtuse. The component parts of the pieces are semi-cylindrical wall of a 55-gallon drum and rectangular roofing panels, respectively. The metal was covered with a white feldspathic glaze and fired to roughly 2000° F.

Over the course of the creation of each of these thesis pieces, virtually all reference to the geometric foundation was lost. The semi-cylindrical drum walls of *Ft. Worth 24* relaxed into their own weight over the course of two firings, creating an undulating, gunmetal form with a shock of glaze down the middle. The hard-edged *Safety Dance* metal collapsed into wavy and tattered panels of black and white.

In each case, the geometric has yielded to the organic. Man gives into nature to form an indistinguishable union. These pieces, as opposed to the previous suite, collapse the distance between control and release, allowing man and nature to create a hybrid form, one neither could contrive on its own.

The Fibers

59+/- Acres

Petunias (1)

Petunias (3)

In ceramic fiber, engineers have done an accomplished job in designing a material that resists manipulation or deformation – prime requirements for a sculptural medium. The material is composed of filaments of pure silica that can be woven to produce sheets that are paper thin or blankets many inches thick. It's the cotton white, high temperature cousin to common fiberglass insulation and has virtually no track

record as an artistic medium. For this project, issues related to its structural integrity took a unique spin relative to the other classes of materials in this thesis. The fiber is a highly durable and resilient material during the firing. The tough part is crafting a form with enough post-firing rigidity to resist deterioration during the exhibition.

All the fiber pieces in the exhibition were created out of the material's most common form – 1 inch blanket. The material was saturated with soda ash, covered with glaze and undergirded with metal. The blanket, employed in a double-layer for *59+/- Acres* and in four-ply layers for the *Petunias* series, allowed for the practical creation of stable and voluminous pieces. The soda ash and glaze helped to bind the fibers together and create a material that resists degradation. The metal, as is the case with pieces throughout the exhibition, provides the structural foundation.

59+/- Acres are painterly pieces, borrowing freely from the conceits of abstraction: drips, surface texture, and amorphous imagery. The three were fabricated horizontally in a tightly controlled manner, but were fired vertically in an environment that allowed the natural energy of the kiln to imprint its design. The resulting fusion produced some of the most compelling pieces in the show.

The virtual tension between the elements of the composition and how they were created is inescapable. The marks and forms on the surface speak to recent history of contemporary art, while the material and processes that created them give a new twist to the notion of action art. The line between man and nature is blurred during their creation and later in their exhibition to produce a geo-organic unity.

Petunias (1) and *Petunias (3)* emphasize the sculptural materiality of the fiber to a greater degree than does the earlier piece. Sitting six inches off the wall and

possessing a much more undulating and textured surface, the square objects read as pillows before they do paintings. They possess a gooey/cratered surface with a supple range of light coloration, inviting meditations on polar lava fields or lunar surfaces. These pieces addressed most effectively the material's physical demands, offering a process-oriented baseline for continued exploration.

The Plasters

Sheephead

Beetle

Davos, Switzerland

For a material-oriented ceramic sculptor, this class of work holds the most technical satisfaction and the greatest potential of any of the pieces in the exhibition. In the world of the potter, plaster is commonly the arch enemy, capable of ruining otherwise finely crafted functional pieces when bits of it find their way into a batch of clay and is fired in the kiln. But as calcium sulfate, plaster is most definitely a ceramic material with the potential to do the work of other ceramic compounds in the kiln with the added benefit of sculptural integrity in its non-fired state. By combining the plaster with frit, I have developed a hybrid material that can be formed through conventional additive or reductive techniques and then fired to reveal a milky sweet substance that is equal parts body and glaze.

The plaster pieces are the only expressly three-dimensional works in the exhibition and as such, deal less with painterly organizational concerns. Instead, each object has individual associations with utility, inviting questions of lost function, or composition, generating impressions of landscape. Tool or phenomenon? Invariably,

neither category satisfies, positing questions of designed purpose and time wrought reality.

The three plaster-based pieces in the exhibition were built with metal armatures. *Sheephead* and *Beetle* were cast in a mold with expanded metal, square tubing and threaded rods, while *Davos, Switzerland* was constructed by covering expanded metal with material. The centenary arch and cone are the foundations for each of these pieces. *Sheephead* and *Beetle* were cast in the same mold of an ovoid form generated by a series of naturally sloping arches, while *Davos, Switzerland* was a mountain-like conical shape before firing.

In each case, the hard-edged geometry yielded to an organic reality in the kiln that blurs the line between man and nature. *Sheephead* is a crustaceous remnant of a shape whose metal undergirding and deliberate design and construction are apparent. Yet the form is enigmatic, bringing issues of craft and function into question. A creator gave it shape but either time or nature has intervened. Its geometric foundation is only faintly visible, requiring the active engagement of the viewer to bring it to the fore.

In *Beetle*, material and process have given way to form with alternating anthropomorphic or terrestrial associations. Viewed at a distance and from above, it takes the shape of a torso; man rendered lifeless. At a more intimate distance, the snowy material reveals a myriad of crevice-like fissures over a sloping hill, penetrated by dramatic metal passages that run through the form. Discarded object or diorama? Neither path lends itself to a satisfying conclusion.

Davos, Switzerland answers the question of what you get when you cross a volcanic eruption with an avalanche. The plaster-based material is frozen in active flow

down the sloping sides, gathering at the base and revealing the expanded metal substructure on top. The natural associations are strong in this piece, with questions of man's presence intervening upon consideration of construction and material.

CHAPTER 3

CONCLUSION

The answers to the questions that predicated the study are “very,” “many” and “yes,” respectively. From the material-based perspective, the answers to the questions were simple: metal fired in a kiln has problematic visual potential; ceramic fiber is engineered to resist the structural demands which sculpture places on it; plaster needs to be combined with a glassing agent to yield fireable material.

Moreso than facile answers, however, the work executed for this thesis revealed to me an amazing universe of structural and visual potential to more fully exploit the expressive power of ceramics. Sculpture of this nature is an intimate dialogue with one of the most elemental components of nature – heat. The materials I fired in the kiln to produce this work can only be called “ceramic” under the broadest possible definition of the word. Nonetheless, the component parts of the pieces blended together in a variety of ways to record a richer and more revealing document of the power of nature and man’s relationship to it.

At the beginning of my education, ceramics was described to me as anything on the periodic table of elements that is neither a gas nor a metal. I remember thinking all those little squares must be jealous of Al and Si because they were so rarely allowed the opportunity to play. At the conclusion of my education, I find the implications of that description far more complex than I ever suspected. The work executed for this thesis has left me with far many more questions about structural and visual combinations than I had expected.

Capturing and documenting heat's power is mesmerizing. The results it produces are alternatingly beautiful and grotesque, offering another entry point for the age old meditation on the sublime. The path I have sought for my work is one which grounds visually exciting elements is a deeper and richer complexity of material and process. Upon cooling, the pieces reveal themselves to be a dialogue between man and nature, forcing us once again to reconsider just what exactly it is we consider to be beautiful.