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IBRIDA

By

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B.F.A. University of Indianapolis, 2001

A Thesis
Submitted to the Faculty of the
College of Arts and Sciences of the University of Louisville
In Partial Fulfillment of the Requirements
for the Degree of

Master of Arts

Department of Fine Arts
University of Louisville
Louisville, Kentucky

December 2012

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A Thesis Approved on

December 6, 2012

By the following Thesis Committee:

Todd Burns

Thesis Director

Stephen B. Swan

John P. Begley

DEDICATION

This thesis is dedicated to my husband

Danny Struck

as well as family and friends

who have given me invaluable time and resources

for this educational opportunity.

ACKNOWLEDGMENTS

I would like to thank my professor, Todd Burns, for his encouragement and guidance. I would like to thank the other committee members, John Begley and Steven Swan, for their willingness to be on my committee and for their insightful comments. I could never thank enough my wonderful friends and family members along the way that have given me nourishment and kindness which has allowed me to develop my art and further my education. I particularly want to thank Gail and Bill Parish for their steadfast friendship and support.

ABSTRACT

IBRIDA

Dawn Struck

December 6, 2012

This thesis is a study of my current body of work, both formally and conceptually. It begins with an *Introduction*, explaining the origin of the term hybrid and the distinct advantages as well as disadvantages hybridization has on a species. It also discusses the effects incurred by the environment on plants and humans.

Chapter II, *A Curious Collection of Biomorphic Forms*, provides an overview of the concepts and interplay between the surface treatments of the forms and their sculpted interior elements and how certain forms reveal, while other forms hide themselves from the viewer. It also confers the motivations behind the work in relation to botany, entomology, anatomy and human traits.

Chapter III, *Process and Material*, describes the production techniques used in the work, including choice of clay, building techniques, glazes and firing temperatures. It also explains the surface treatments as they pertain to the overall form and feeling of certain pieces.

Chapter IV, *Influences*, explores some of the artistic, historic and scientific influences in the use of natural forms and highlights some of the sources of inspiration for my work.

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SECTION I INTRODUCTION

"It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change." - Charles Darwin

Our daily environment is a powerful effect on our personal growth. At times, our environment pushes against us, stunting our development. At other times, our environment acts as a fertilizing agent stimulating growth, encouraging change, ensuring progress. Plants, animals and microorganisms like us, must adapt to their environments in order to survive – they must be responsive to change- often resulting in a hybrid version of the original, which can result in something stronger, heartier and more durable. Each of my sculptures tells its own story of growth, change, hybridization, survival and habitat through posture, surface textures and unique contour form.

Digging into the origin of the very word hybrid, one comes across a Latin term rarely used before 1850. The term is Ibrida. Hybrid/ Ibrida is considered an amalgamation of disparate parts, resulting in a uniquely homogenized whole. This idea is what inspired my body of work. Considering possible hybrid scenarios and the challenge of bringing them into three dimensionalities is of great interest to me.

Research into hybridization brings about many implications depending upon context. The biological context refers specifically to hybridization as “the

offspring resulting from the mating of two genetically distinct individuals” (Merriam-Webster, 2012). The individuals can be mammalian, avian, insect, plant, piscine or reptilian. Botanists know, for over a century now, crossing select plant and animal species to form hybrids often results in offspring with “increased vigor, including increased growth rates, biomass, and fertility. Hybridization between distinct subspecies or even between distinct species often results in offspring with superior growth characteristics and vigor, a condition known as heterosis.” (Shull, 1948, p. 442). It is through the idea of heterosis that I aim to create, by taking what I deem the best parts or most appropriate parts of various organisms and reassembling them into my own creations.

I relate to this research in the sense that as an educator who appreciates learning, I am constantly multi-tasking, combining multiple ideas, styles and techniques. I saw this as my own personal hybridization of effort in hopes of achieving the ultimate heterosis of learning within myself and my students. There is a constant amalgamation of information which is visual, audio and tactile that I am delivering daily to my students while at the same time I realize that their environments are affecting them in ways that I may or may not be able to see.

Environments affect plant life in many ways. One such way is through tropic movements. According to Roger P. Hangarter, Professor of Biology at Indiana University, tropisms are “directional movement responses that occur in response to a directional stimulus. Plants are not able to relocate if they happen

to start growing where conditions are suboptimal. However, plants can alter their growth so they can grow into more favorable conditions. To do so requires the ability to detect where the conditions are better and then alter their growth so they can "move" in the appropriate direction" (Hangarter, 2000). One of the most commonly observed tropic responses in plants is phototropism, in which plant stems grow towards light.

The work *Pterditophyte* illustrates the biological phenomenon that is phototropism. In *Pterditophyte* the twisting and turning motion of the stems mimic a plants natural growth towards the light. The unfurling of a fern's frond is the apex of each stem. All are in various stages of development based upon exposure to the environment. The same is true of each of us as we are also in various stages of development directly affected by current situations. The colors on each of the stems are gradated exhibiting a darker base with heavy textural elements that progressively show lighter coloration as they ascend towards the sunlight.

Figure 1

Pterditophyte

Environments affect our movements both literally and figuratively as well as our moods and personal characteristics. Through anthropomorphism, I am capturing human like qualities within my work, encouraging the pieces to appear to have reactions to the environment around them. In *Recludere*, the personality trait of reclusiveness is exhibited. In this particular piece the contour of the form coils inward holding back what is within. The viewer is coaxed to move closer to search for what is inside the piece. The overall color palette chosen for the piece is dark in tone suggesting feelings of loneliness, solitude and isolation. The festering surface treatment repels which can

Figure 2

Recludere

be considered a defense mechanism of reclusive beings. If one can turn people away by unappealing actions or appearance they do not have to socially engage or interact.

Human like features such as heads, torsos and feet are other anthropomorphic qualities found in my pieces. Not only does *Recludere* show a human personality trait, it exhibits these human anatomical parts and holds a very human posture. The piece clearly has a neck, hips, feet and a head. The head is hanging down; the shoulders slouched furthering its secluded demeanor.

Of particular importance in this body of work, is my effort to capture the essence of hybridization. The work is less about the mating of two distinct individuals and more about the possibilities of multiple biological sources homogenizing into distinct singular forms that hold specific visual connections to one another. Together they show a progression of form. This is an idea much like that of ontogenesis which is the “the development or course of development of an individual organism” (Merriam-Webster.com, 2012).

SECTION II

A CURIOUS COLLECTION OF BIOMORPHIC FORMS

This body of work exhibits concepts and interplay between the surface treatments of the forms and their sculpted interior elements which with certain forms reveal and other forms hide themselves from the viewer. It also discusses the motivations behind the work in relation to arthropods, botanical forms, anatomical parts, micro to macro and the revealing of what is within as an exterior element.

Many of my forms are segmented as insects would be. Insects are an easily recognized group of arthropods. Their body plan consists of a head, thorax and abdomen. According to the geological database of Wisconsin University, "Arthropods typically have a bilaterally symmetrical body segmented into specialized regions. Each segment can bear at least one pair of appendages. These appendages were originally designed for walking, but every group has modified at least some of them for specialized uses: antenna for sensing, mouthparts for feeding, claws and pincers for food gathering or defense, gills for breathing, paddles for swimming, spines and stingers for protection, spinnerets for web building." (Wisconsin University, 2012).

A scorpion falls in to the phylum arthropod and is a major influence on the piece titled *Telson*. In *Telson*, the overall form pulls from many biological sources. The

terminal segment of a scorpion's tail is the telson, a segment used primarily for protection. The overall contour is reminiscent of the chrysalis stage of a butterfly's metamorphosis. During this state the butterfly is very vulnerable to its environment. As fortification, there is a protective outer shell that I have added that houses the vulnerable interior form. An added aspect of defense in this piece is the rugous surface treatment. The surface is reminiscent of the periderm of bark on a tree. According to Dr. J.B. Hall, "when the cells of tree bark are in the periderm state they are regarded as contributing significantly to the trees protection against micro-organisms, insects, water loss and external temperature extremes" (Hall, 1977, p. 4) In this piece, it is the telson that is of interest. Instead of having a spiky tip, you will find a soft rounded tip unable of inflicting pain. The tip is turned in towards the form itself instead of being aimed at potential threats within the outside world.

Figure 3
Telson

The work *Ommatidium* is also reminiscent of arthropods, specifically the compound eye of a spider which was the inspiration for the base of the piece. This work combines the compound eye with a bone-like surface treatment within a form that is very fluid, curvilinear and plant like. In *Ommatidium*, the color of the majority of the body resembles that of bone. I chose the warm red hue for each ommatidium as a color indicating impending danger. This piece

exhibits my attempt to make what is micro, (each individual ommatidium of a spider's compound eye) into something macro, and changes its function from sight to locomotion.

Figure 4

Ommatidium

Each form encompasses and evokes the questions of “origin, diversity, structure, internal processes and relationship with their physical environment” just as the study of botany does (Berg, 2008, p. 3). In *Chitin*, the lobular characteristics place heavy emphasis on the sinus; the deep recess between the lobes. In the research conducted by Dr. Stephen G. Saupe of the ecophysiological analysis of leaf shape, it is determined that the thicker the leaf the better able it is to “retard carbon dioxide intake and the deeper the sinus, the better able it is to retain water”. (Saupe, 2009). The work *Chitin*, exhibits deeply recessed sinus crevasses alluding to the need for nourishment. The contour form resembles the look of bone and tendon as

well as armor. It is armor that influenced the title for this piece. The armor of the arthropod body is chitin. In this piece, it is the armor or chitin that is protecting the precious inner growth.

Figure 5
Chitin

Many forms suggest to the viewer a strong influence of human bone structure consisting of short, flat, irregular or sesamoid bone. In *Diaphysis*, the long bone, particularly the femur bone in a human leg, as my inspiration for the surface treatment. There are also deep cavities between each protrusion that are reminiscent of both flat and irregular bones found in human anatomy. The overall contour shape of the form amalgamates a Poker Plant also known as Kniphofia Uvaria with human anatomy. The surface treatments with the fluid and reticulation glazes evoke a sense of viscous materials within the human. This exhibits my intent of bringing the interior to the exterior surface.

Figure 6
Diaphysis

Getty Images

What if various biological categories of botany, entomology and anatomy were rolled into one creation? What if each piece could speak? What would it say? Connecting my work to human attributes in an anthropomorphic way is very natural. As I create each piece I begin with very concrete sketches of my intended outcome, inevitably half way through the creating process, I find myself working more intuitively and associating personalities to each piece. It is as if through some unspoken dialog I am able to respond sculpturally to what it wants to become.

SECTION III

PROCESS AND MATERIALS

In this body of work I utilize a variety of ceramic techniques, glazes, paints and mixed media armatures to enhance my desire to evoke a sense of possibility and believability in combining disparate parts.

The organic forms are constructed with a variety of hand-building techniques. Most often, various sizes of dome shaped slump molds are utilized to construct the initial form. Once started, simple geometric forms are added to various segmented parts. For surface treatment, I rely heavily on the natural drape of the soft slab as well as the visual influence of various human bone styles, arthropod features and botanical references.

Many of the pieces have to be propped by soft pillows and other objects to encourage them to keep their shape while becoming leather-hard. I have created many of my own texture tools in an effort to show a more natural surface treatment. Each piece goes through a stage of carving to emphasize deeper shadows and plane changes and all pieces are smoothed for hours with slip which is applied with soft round and flat brushes.

The pieces are constructed with mid to high fire range stoneware clay bodies to enable me to put them through a multitude of firings without worry of cracking. Hand building is appropriate for my work in that it exalts uniqueness

and organic qualities. Hand building also seems appropriate in that it is the most ancient of all pottery techniques and harbors in its qualities a sense of primal human nature.

My selection of glazes for this body of work range from cone 2 to cone 06 in temperature. Subtle gradations of color are achieved through spraying a wide range of under glazes onto the forms. Metallic sheens through iron oxides are noticeable in deeply recessed areas. Running drips and rich puddles of amber pool in deep cavities due to a copious application of a fluid over glaze which is both sprayed onto the form and applied with an ear dropper and palette knife to emphasize its viscosity which serves to highlight various features. The piece titled *Corum* provides an excellent example of the various glaze applications that I employ.

Figure 7

Corum

If encouraged to describe my surface texture choices to someone that hasn't seen my work

before, I would say the surfaces are organic, layered and undulating. The soft slabs inflate, deflate and are fragmented then reassembled. The surfaces overlap, merge and separate while at the same time open and close themselves off to the viewer. I consider each piece a complex surface.

SECTION IV

INFLUENCES

Section IV, *Influences*, explores some of the scientific and artistic influences in the use of natural forms and highlights some of the sources of inspiration for my work. I look to these influences in addition to the obvious botanical, entomological and anatomical influences I have reference up to this point.

Ernst Haeckle is a biologist and illustrator of the 19th century that believed “the structural perfection and differentiation in the course of succession of a complicated form not only represented a means of classification for the individual type, but became the basis of establishing lineages themselves” (Breidbach, 1998, p. 10). Connecting my forms visually by creating them with identifiable visual lineage is important to my work. I am particularly influenced by Haeckel’s biological illustrations titled *Art Forms in Nature*.

Many of my forms are direct three dimensional responses to some of Haeckle’s

two dimensional illustrations. Playing off of his acknowledgment of the ornamental morphology of the Siphonophorae, which is a class of marine invertebrates.

Figure 8
Siphonophorae/Haeckle

Some ceramic influences to my work include Susan Beiner and Lindsay Feuer. Both ceramicists use biological forms as a basis for their creative influence. Susan Beiner's work has an effect on my latest pieces by way of surface treatments and configurations.

Figure 9

Susan Beiner

Synthetic Reality

I admire Susan Beiner's take on arrangement of organic forms and various glaze treatments to achieve more organic looking surfaces. Lindsay Feuer has a special finesse of form that I admire. Her forms are very elegant and their achromatic finishes encourage the viewer to appreciate each contour and the way light interacts with the surface.

Figure 10

Lindsay Feuer

Hybrid Flora No. 8

SECTION V

CONCLUSION

Through the creation of this body of work I realize that I enjoy working in a series and will continue to do so. I still have a strong desire to explore organic sculptural forms and new hybrid possibilities. Hand building sculptural forms that seem to grow out of the ground plane or are suspended within a ceiling fixture tapering down to the ground plane through space are possible directions I would like to take my work. My future goals as a lifelong learner are to continue to build my textural glaze collection, share my passion for ceramic sculpture with others and continue creating work that I can proudly exhibit.

The works included in this thesis are an important educational and experiential step forward in my development as an artist. Exploring hybridization, arthropod morphology, botanical etymology and human anatomy inspired me to create the body of work; *Ibrida*. Through this work I was able to explore the ideas of heterosis, anthropomorphism, environmental influence on our existence and change. In the words of Ernst Haeckle, "Nothing is constant but change. All existence is a perpetual flux of 'being and becoming!' That is the broad lesson of the evolution of the world." (Breidbach, 1998, p. 12)

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