

POINT OF ORIGIN



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ABSTRACT

Point of Origin expresses my fascination and artistic practice of ideas surrounding a cosmic origin from the moment of the Big Bang and I try to understand this idea by focusing on simply a tiny fraction of it.

In this paper I outline a shift in my studio practice from a time-consuming, regimented way of working to a more immediate and intuitive approach, the discovery of new materials, research, and a connection to Ukrainian folk art traditions like embroidery and color symbolism. I discuss the scientific influences of cosmologist Neil deGrasse Tyson and how my work connects with the elemental practices of painter Richard Tsao and the systematic nature of glass blower Josiah McElheny.

Also included in this packet is a recent artist statement, curriculum vitae and images from my installation, *Point of Origin*, which is one route to a new systematic approach to understanding origins of our universe.

INTRODUCTION

Carl Sagan once stated, "We are a way for the cosmos to know itself."
I believe the cosmos is a way for me to know myself.

I have always felt an innate connection to the night sky. I grew up in western North Dakota where empty space was bountiful and the vastness of the sky was inescapable. As a child and well into young adulthood, I spent numerous nights in the country and on our balcony lying awake late into the night under the stars. With my eyes fixed upwards, I forced myself to focus beyond the initial veil of stars easily visible. In doing this, clusters of faint stars revealed themselves and I could experience the depths of the night sky. As I reflect back on those nights it has become clear to me that North Dakota serves as the point of origin for my fascination with the night sky. Only after moving across the country to a foreign landscape where city lights serve as surrogate stars did I begin to notice that the depths of the sky were less accessible to me. The need to connect to the cosmos has never left me and a desire to repair the connection I once felt underpins my continual depiction of the cosmos.

CHAPTER 1: *Content Drives Process*

My interest in rendering a cosmic atmosphere first manifested itself during my time as an undergraduate. The work of Vija Celmins and the process of the mezzotint were highly influential in the creation of my imagery of the cosmos. Creating a mezzotint is a time-intensive process of engraving/roughing the surface of a copper plate with a tool called a rocker. The rocker is a crescent shaped piece

of metal with tiny teeth that creates a bur when rocked across the plate. A pass across the plate is a designated pattern of angles repeated with the rocker and every pass creates an overlap of burs. This overlap results in rich, velvety tones varying from light to dark. When I discovered the visual depth and rich tones the mezzotint rendered, I made an immediate connection to the depths of the sky at night. I expressed interest in pursuing the mezzotint and I was introduced to Vija Celmins's various mezzotints of spider webs, but I was especially captivated by her larger mezzotints that captured the depth and the patterns of a night sky [Figure 1]. My earliest mezzotints plucked a tiny fraction from space and explored a simple compositional movement within a starscape [Figure 2]. The mezzotint's image fields were no bigger than 2" x 3.5", which allowed the print to fit conveniently in the palm of the viewer's hand. Working at such an intimate scale allowed me to reverse the relationship of feeling insignificant to the vastness of the universe and place the viewer in a more significant position.

As much as I enjoyed the process of rocking a plate (it was meditative and satisfying to watch the smooth surface of the plate transform into a field of burs), it was very time consuming and as a result I felt I had become too regimented in the planning and execution of my imagery. When I entered my first semester of the MFA Book Arts/Printmaking program, I decided to put aside mezzotints and endering images of the cosmos to explore other materials and subjects. This distance from the time-consuming process of the mezzotint allowed me to discover other methods of creating imagery that would unexpectedly return to referencing the cosmos, but in a new way.



Figure 1: Vija Celmins, *Untitled (Galaxy)*, 1985; Mezzotint; 11 5/8" x 14 11/16"

Photo: Vija Celmins : Wüste, Meer & Sterne = Desert, sea & stars

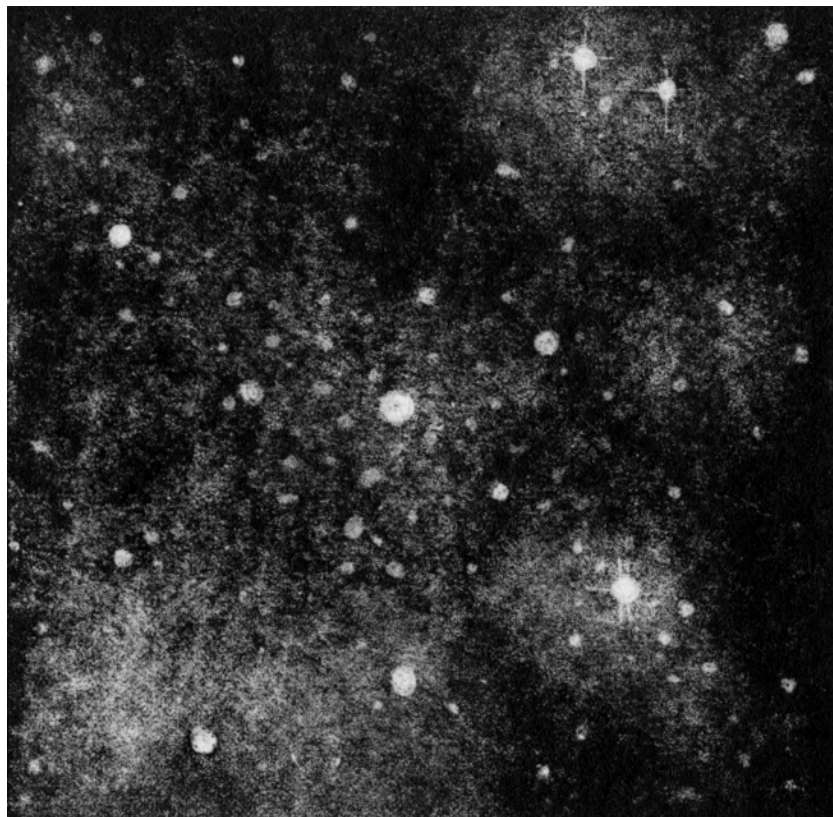


Figure 2: Erin Malkowski, *Heaven's Study III*, 2007; Mezzotint; 1½" x 1½"

One example is *Contours (After Tawney)*. I executed the project during winter break while away from my studio. I was restricted to the few materials I brought with me and a tight deadline. I only had a few sheets of handmade paper, thread, and the front and back boards of the book *Deirdre and the Sons of Usna* (a tragic Irish myth), along with a few page remnants from the book. Working within those restrictions, I began to work intuitively. I modified the handmade paper with common household items: coffee, lemon juice, food coloring and an iron. I let the handmade paper soak in a small tray filled with diluted coffee to achieve an "aged" look similar to that of the page remnants from *Deirdre and the Sons of Usna*. I wanted to explore the potential of the handmade paper through the manipulation of other ingredients found within reach and alter it beyond simply toning it a different color. The combination of a hot iron and lemon juice caused the paper to darken and buckle, creating a rippled effect. To offset the tone of the coffee and stains from the lemon juice, I combined food coloring with the lemon juice and hit it with an iron.



Figure 3: Erin Malkowski, *Contours (After Tawney)*, 2012; Altered book; 7" x 4" x ½"

Photo: John Bernardo



Figure 4: Erin Malkowski, *Contours (After Tawney)*, 2012; Altered book; 7" x 4" x ½"

Photo: John Bernardo

My experimentation of combining acidic liquids with pigment and heat yielded unexpected but pleasant results. Natural brown tones from the coffee, splotches of burnt lemon juice and pops of vivid reds and yellows from the food coloring created rich tones and reticulations on the page, similar to printmaking processes I used in undergrad to create a cosmic atmosphere [Figure 3]. After I altered the handmade paper I wanted to explore “drawing” with thread on paper. I punctured through the surface of the page and began to stitch. I repeated a similar shape over and over of thread radiating out from a single point, creating triangles of varied sizes and angles. Some radiated out from the fold or the edge of the sheet, while others existed in the middle of the page [Figure 4]. When I moved on to the next spread, I reacted to the stitching revealed on the reverse side of the page and the images began to build and allude to a narrative.

Mapping (Mandala A Day) was another piece for which I proposed a set of guidelines to follow. I created one mandala a day with materials I usually found at hand on my desk and spent no more than a half-hour to an hour on each piece. My sketchbooks were typically filled with notes about my research and more ideas than actual images. This project provided me with opportunity to work through concepts and make connections through imagery with seemingly unrelated ideas in an immediate and intuitive manner.

Working within the guidelines of time and specific materials in as I did in *Contours (After Tawney)* and *Mapping (Mandala A Day)*, I found a method of working that allowed a spontaneity to guide my hand. This new, intuitive process led me to explore the transformative potential of materials such as thread and paper in new ways, ways that would later inform many of the pieces in my thesis exhibition.

CHAPTER 2: *Exploration of New Processes and Materials*

Over the past two years, my experimentation with using thread as a drawing tool was a direct result of one of the first assignments introduced during our first fall semester. The *Taxonomy* project required us to depict ten different collections through varied choice of materials and processes. Just as I made an immediate connection of the mezzotint process to the night sky, I experienced a similar, immediate association, in the context of the taxonomy project, to my Grandmother's collection of Ukrainian embroidery patterns.

Ukrainian Folk Art Traditions: Embroidery

Embroidery is one of the predominant practices in Ukrainian folk arts and has a presence in both a secular and religious context. Embroidery can be found adorning a home with splashes of color on pillows, wall hangings, tablecloths and clothing. The use of color is significant in Ukrainian embroidery. Age dictates what patterns are used and the combination of either vibrant or dull thread. Troyd Geist describes the process as using "bright colors all the way or dark colors all the way" (5). Dull, dark colors are commonly reserved for elder generation and light, bright colors are reserved for the younger generation. The use of yellow and blue threads is also significant in the symbolism of Ukraine: yellow stands for fields of grain and blue for the sky. In a religious context, the most commonly embroidered item is the *rushnyk* (plural, *rushnyky*) [Figure 5]. The *rushnyk* is an embroidered cloth, similar to a scarf, that follows an individual throughout religious and ceremonial occasions. Bestowed upon an individual at his or her birth, it is present at baptism. During the marriage ceremony, it is tied around the couple as a symbol of unity. Traditionally, embroidery adorned the inside of the coffin, but now the *rushnyk* adorns the top of

the coffin and is later draped over a photo of the deceased (6 & 7). The association of these embroidered cloths with the major themes of life and, specifically, death and resurrection are of particular interest to me and will be elaborated upon later in this chapter.



Figure 5: *Rushnyk*; Photo: <http://www.slavorum.com/forum/index>

Embroidery is not only one of the most predominant folk art practices in Ukrainian traditions, but it is also deeply rooted within my familial traditions. This artistic practice was passed on through generations in Ukraine and traveled across the sea with the emigration of my great grandmother, Baba Pearl, and her family to the United States. Baba's mother and sister brought with them embroidery samples from the Old Country to use as patterns. These patterns have been passed along to my grandmother and her daughters, including my mother, and now I adapt this tradition in varied ways within my own art practice.

For the *Taxonomy* project I drew from a small assortment of Ukrainian



Figure 6: Ann Basaraba, Embroidery Pattern
Sketches; Colored Pencil; 8½" x 11"

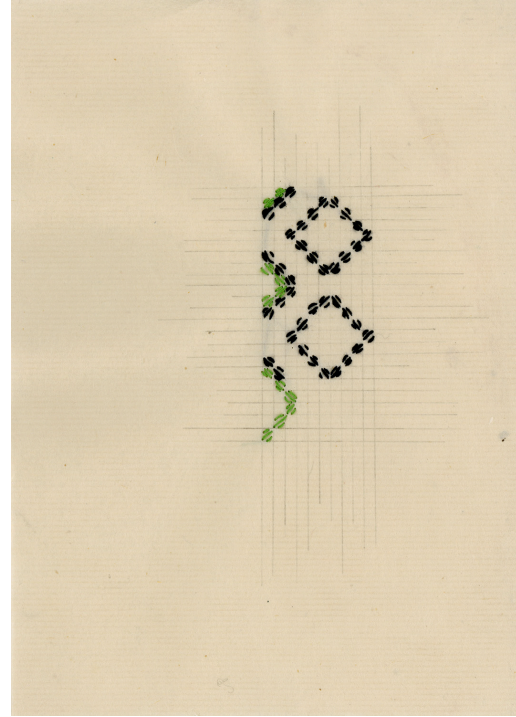


Figure 7: Erin Malkowski, Embroidery Pattern
Sketch #6; Kitakata, Thread; 5" x 7"

embroidery patterns designed by my grandmother [Figure 6]. Her sketches displayed multiple designs to a page and many of them were partially rendered, giving just enough information to suggest the rest of the pattern. I was drawn to their incompleteness, leaving me with a desire to pick up where she left off. Inspired by the patterns she created, I began to create my own [Figure 7]. I doubled up sewing thread instead of the traditional embroidery floss (it was the material I currently had on hand) and stitched the patterns using a grid I drew onto kitakata instead of fabric. Kitakata is a handmade Japanese paper created from the fibers of a group of Japanese shrubs called *gampi*, resulting in a soft, smooth surface. It was because of the quality of its softness that I chose it. I discovered that the more I handled the sheets and stitched into them, the softer the paper became and the more it mimicked fabric. After I started the project, I recognized I would not have

the time to stitch the pattern of a full composition and wanted to complete a full composition with the pattern. So I chose to render a small section and gave myself a time limit for making each. That limitation gave my final collection an incompleteness similar to that of my grandmother's sketches. For me that incompleteness focuses on the individual parts that make up a whole, something that characterizes a later piece, one that will be discussed later in this chapter. This project gave me a way to bridge the physical distance between myself and my family and also connected me to my Ukrainian heritage.

My grandmother spends most of her day stitching various blouses, pillows, quilt squares and scarves, all the while praying. Her embroidery is so intertwined with her daily prayers that they are inseparable. I relate her experience of hours spent stitching and praying to the hours I spent rocking mezzotint plates, and the quiet contemplation I found through the repetitive movements.

I explored our shared contemplative practices through an offset book printed at the end of my first semester. As I sat and stitched, I imagined my grandmother in her chair embroidering. *Intertwined*, a visual and text-based narrative, explores this imagined experience, occurring simultaneously for my grandmother and me, although we are miles apart. The difference in our practice is represented by the two different colors of text, —black and red— the two predominant colors my grandmother uses in her embroidery: black for her spiritual text and red for my meditative text. As the narrative progresses, my red words (*paper, red, and thoughts*) overlaps her words (*canvas, black, and prayer*). Accompanying each voice is a set of patterns within a grid that suggests the contemplative state of each of us while we embroider, the word prayer for her and the word thought for me. However, despite those differences, at the end of *Intertwined*, the separate voices meld into one. *Intertwined* suggests that every generation becomes further removed from

the traditional values of parents and grandparents, but by appropriating Ukrainian embroidery in my work I express a desire to reconnect with my heritage and those values. The physicality of thread creating an image binds me to my history; the physical motion of stitching connects me to the motion of those who have come before me. My hands are their hands.

Ukrainian Folk Art Traditions: The Art of Pysanky

Embroidery is not the only folk art tradition from which I draw; the art of egg decorating, known as *pysanky*, is another rich artistic practice in Ukrainian traditions. This art form has been passed down through generations for thousands of years and a certain regard still exists for the transferential power of the *pysanky*. The combination of varied symbols and colors illustrated on the egg tell a story and give the egg its power. Specific symbols of the sun, moon, stars, plants, animals and various geometric patterns adorn the eggs to assure good harvests, heal, bring

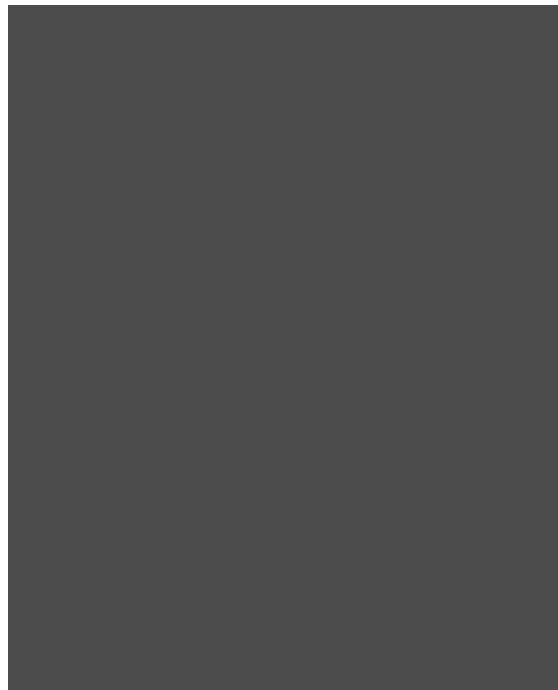


Figure 8: *Pysanky*; Photo: Johanna Luciow

children to a childless couple and protect a home from fires [Figure 8] (Schuman 82).

The egg is a symbol of the essence of life —the yolk represents the power of the sun and festivals were held in the spring honoring its warm and regenerative return after a long winter. The egg white —representing the influence of the moon, was also held in high regard. Centuries ago, in agriculture, a strong relationship existed with the power of the moon and the growth of crops (Geist 15).

The use of color was very important in transferential power of the egg. Specific colors are associated with aspects of human qualities and experiences: black representing eternity and remembrance, blue for trust and good health, yellow for youth and kindness, red for the sun, hope and strength, and so forth. Prior to the commercial dyes used today in pysanky, dyes were rendered naturally. Plants such as red cabbage, yellow onion skins, and dandelion heads were boiled down to create their dyes. Even sauerkraut juice was used as a bleach.

My application of natural dyes to paper and books allowed room for manipulation, but also room for the unexpected, similar to my experience with *Contours (After Tawney)*. For example, dye made from red cabbage has the appearance of a very light purple in liquid form. When I dipped a text block made out of handmade Japanese paper, it dried the most vibrant pink and purple, completely unexpected from its prior light purple color. To tone back its vibrancy I left the text block to soak in coffee over night. The next day the pinks and purples not only toned down but, the edges of the page were sticky, similar to caramelization. I embraced the unpredictability of the materials with further experimentation of dipping paper into various dyes, exposing them to an acidic such as vinegar —which further changed their color— and exposure to sunlight and extreme heat also influenced change in their color properties.

Sewn Particles

One piece on display in my exhibition that appropriates both Ukrainian traditions of dye making and embroidery is *Sewn Particles*. *Sewn Particles* not only explores ideas of our cosmic origin, but references my first applications of embroidery on paper I did for the *Taxonomy* project. It is composed of three 7½" x 22" panels of kitakata paper. [Figure 9] Following a similar method of approaching my original embroideries on kitakata, I outlined a grid on the back of the sheet and prepunched holes to guide my stitching. A combination of dipping and pouring various dyes created from red cabbage, coffee, iron sulfate, brazilwood, cochineal, and green buckhorn berries, were applied to each of the separate panels. I allowed the panels to air dry over night and then applied extreme heat in a photo-mount



Figure 9: Erin Malkowski, *Sewn Particles*, 2014; embroidery, kitakata, natural dyes; 28½" x 22"

Photo: John Bernardo

press (used to heat-set photographs to mounting board). The heat intensified some pigments like the coffee and cochineal, while fading out the red cabbage. Even now as the piece hangs in the gallery, exposure to light continues to change the color.

The content of *Sewn Particles* is a continued exploration of *Transference*, a mezzotint I completed at the end of my first year. The image resulted from the spring *Works-in-Progress* show when I displayed two separate images from *Mapping (Mandala A Day)* together and witnessed a relationship between the two. *Transference* was inspired by my idea of cosmic dust as a lifeline connecting celestial bodies to our physical bodies (an idea I will discuss in Chapter 3). Arranged vertically, at the top of the print is a celestial body created out of individual dots dispersing downwards and coalescing into a figure lying horizontally at the bottom of the page.

I wanted to continue exploring this composition of transferring dust particles from one body to another in the form of stitching. The partial rendering of the image calls attention to the individual particles rather than the composition of a whole, a suggestion of our physical composition of individual particles of dust. I installed the individual panels with a pair of sewing pins at the top corners and left the bottom free to float and move like a tapestry. *Sewn Particles* references similar themes of life, death and resurrection surrounding the *rushnyk*. It tells the story of our origin and, like the *rushnyk*, it serves as a reminder that death is not the end. Existing as individual particles of dust, we live on through those who come after us, just as we eternalize the dust of all those who have come before us.

CHAPTER 3: *The Inspiration of Cosmic Origins*

A Personal Mythology

Research is highly influential in the conceptual development of my work. Prior to graduate school, information I gleaned from books on religion, philosophy and psychology, inspired the underlying content of many of my prints. During my undergraduate years, my work emphasized an exploration of my personal mythology inspired by the writings of Joseph Campbell. I was interested in Campbell's approach to mythology, in particular how it has evolved from reflecting the collective group to one centered more on the individual. I spent time reflecting on childhood memories that continued to resonate over the years and considered their impact upon me psychologically and on my sense of identity. *Mythopoeia* (Greek for "myth-making") was an artist book created as a response to the exploration of specific memories and their significance. Multi-layered colored mezzotints depicted personal constellations I created paired with a narrative that was significant to each constellation.

We Are Stardust

In the MFA program, my research has been heavily grounded in the sciences, particularly astrophysics and cosmology. Astrophysics is the branch of astronomy that deals with ideas surrounding the origin of the universe, its physical properties, and the interaction of celestial bodies within interstellar space. Cosmology is the science of the origin and development of the universe, the most accepted theory of the origin of the universe being the Big Bang. Matter and energy became concentrated at such a high density, that it produced the great explosion that began an expansion of our universe that has never stopped (Sagan 2, 246). I find

inspiration in the writings and language of astrophysicists such as Paul Davies, the late Carl Sagan, and by the advancements made in space exploration resulting in constant new discoveries about our universe. I am fascinated by ideas surrounding a cosmic origin from the moment of the Big Bang and by the thought that the death of a star is not the end but, rather, it spreads its influence over the surrounding space, triggering new life. The most important aspect of the theory of our origin I am most captivated by is that all organisms are made of the original dust resulting from the Big Bang. The language that one particular astrophysicist, Neil deGrasse Tyson, uses to describe this concept is particularly compelling to me.

The atoms that make up the human body are traceable to the crucibles that cooked light elements into heavy elements in their core under extreme temperatures and pressures. These stars, the high mass ones among them, went unstable in their later years. They collapsed and then exploded, scattering their enriched guts across the galaxy, guts made of carbon, nitrogen, oxygen and all the fundamental ingredients of life itself.

Neil deGrasse Tyson, *Time Magazine*

Just as Joseph Campbell and Carl Jung's writings guided me through my conceptual development during my undergraduate years and the creation of my artist's book *Mythopoeia*, Neil deGrasse Tyson's words have guided me through my master's work. The idea of our origin existing from the moment of the Big Bang is in part incomprehensible. In my current work I try to understand this idea by focusing on simply a tiny fraction of the idea, comparable in a sense to my first mezzotints, as an undergrad.

An Active Universe

Tyson's words inspired me to consider an image-making process that resulted from chemical reactions of elements. This led to the suggestion that I look at the painter Richard Tsao, in particular his studio practice of using elemental reactions.

Just as I identify with North Dakota as the origin for the content of my work, Tsao's unique approach to painting is influenced by his time growing up in Thailand and spending numerous months during monsoon season when his yard was completely flooded. To replicate that environment for his paintings, Tsao created a tar sealed room he calls his "flood room" (Edwards 6) and sets the temperature at a humid 105 degrees. He throws, pours, and splashes buckets of water and his concoction of acrylic paint and marble dust onto canvas or boards stacked on the floor or leaned against the wall. These actions are repeated over time, unlike my imagery that is created instantaneously, the pieces are left to marinate in pools of color for years. (Decker) Even though Tsao's paintings have the appearance of accidental creation, time and consideration go into each piece.



Figure 10: *Twin Peaks*, 2010; Water-based mixed media on canvas; 20" x 18" Photo: Robert Puglisi



Figure 11: *Surge*, 2010; Water-based mixed media on canvas; 12" x 14" Photo: Robert Puglisi

Viewing Tsao's paintings for the first time I was struck by the intensity of his pigments, reds, greens, purples, oranges, and yellows, along with the build-up of textures resembling that of sand or rock formations [Figure 10]. This layering of color and textures evokes another place, as if they had been chiseled away from a foreign mountain or a dried up lake bottom on some distant planet [Figure 11].

I was inspired by Tsao's spontaneity and his active approach to painting, encouraging me also to be an active participant in the creation of my imagery, to create my own big bangs. I wanted to create prints that were the result of bringing together specific "ingredients" that had a chemical reaction at the moment of contact. I briefly explored altering printmaking inks with chemicals commonly used in printmaking processes such as lithography and monotypes, but the properties of their interaction were less "active" than desired. In search of the best ingredients, I began to experiment with one of the most common household reaction, resulting from combining baking soda with vinegar. When vinegar is added to baking soda it produces carbon dioxide and leaves behind very little residue of either baking soda or vinegar, which is not much to reference a chemical reaction. I wanted a way to capture the essence of that reaction, evidence that something elemental occurred.

Portraits: 5, 24, 82, 679, 713.509 make up a series of prints that apply this new active process of creating my own versions of a Big Bang. I applied powdered pigment and baking soda with vinegar to sheets of handmade paper just after they were pulled from the vat. While the sheet was wet, the reaction melded with the particles of the pulp and the image was ingrained within the surface of the sheet. Spraying or pouring the vinegar across the surface influenced the intensity of pigment and how, in some areas, it dissolved more into the sheet than others. The powdered mixture fizzed and droplets of pigments flecked across the surface as the

materials converged and turned into a gas. Once the reaction began to settle, reticulations formed from the combination of the pigment with the vinegar while in other areas, dried flakes of undissolved baking soda and powder pigment remained. Between the varied textures of dissolved pigment and clumps of dried baking soda, the reaction yielded a desired image resembling shimmering dust and stars [Figure 12].



Figure 12: *Portraits: 5, 24, 82, 679, 713.509*, 2014; Handmade paper, powdered pigment, baking soda, vinegar; 17¼" x 22" Photo: John Bernardo

Embracing the accidental also occurred when extreme heat was applied to the sheet. I continued to manipulate the image by soaking and pouring my natural dyes on to the prints—the same dyes used in experimental books and *Sewn Particles*. To flatten the image after it had been re-moistened, I pressed the image in a hot photo mount press. The temperature was set unintentionally high and in the

short seconds of pressing, I burnt half of the image, while the other half displayed a pattern of radiating heat marks [Figure 13]. Embracing this accident, I played with the amount of heat and length of time under the press to create various heat marks and changes.

I am aware that my experimentations of applying heat, natural dyes and acidic materials to these prints has shortened their life-span and it is another



Figure 13: *Portraits: 5, 24, 82, 679, 713.509, 2014;* Handmade paper, powdered pigment, baking soda, vinegar; 22" x 17¼" Photo: John Bernardo

aspect of the pieces I embrace. The dyeing and baking has made them susceptible to quicker aging; in their short life they have already become delicate and brittle. These prints will crumble and turn to dust in a more rapid time-line than something that was created with care using archival processes and materials. These dust portraits, the evidence of a chemical reaction, will someday return to the dust from which they came, just as we are made of and someday we will return to dust.

CHAPTER 4: *Connecting A Familial Lineage with A Cosmic Lineage*

We are all made of stardust. This theory of origin resonates deep within me and explorations of our cosmic connection formulates the content of my thesis work. The intent of my thesis is to express how our lineage can be traced back to the macrocosm of the Big Bang by exploring my origin within the microcosm of my familial lineage.

The centerpiece of my thesis exhibition, expanding upon this dialogue of both a familial lineage and cosmic one, is *A Cosmic Genealogy*. It is impossible to quantify the expanse of the universe; we are only capable of maneuvering through infinitesimal fractions of space. Similarly, tracing one's lineage back to a definite point of origin is impossible to grasp, but we investigate and chart our lineage one branch at a time.

Creating Planets

During a weekend paper-making workshop earlier this spring I explored a process called pulp painting. Pulp painting is one technique used to draw or create washes of pigmented pulp on handmade paper before it is pressed. To create washes of color, pulp is beaten for an extended period of time to form very short fibers. The finely-beaten pulp are mixed with varied ratios of water to an extremely viscous modifier called "formation aid" which allows the pulp to flow smoothly across the surface of a handmade sheet. Increased ratios of formation aid-to-pulp yield varied levels of transparency in the washes. In my pursuit of materials and processes that could allude to the cosmic, I wanted to explore the potential of transparency in the washes and created stencils of circles, or planets, in various sizes to apply the washes of pigmented pulp and formation aid. The

different levels of transparency affected the intensity of color for each planet. In some, the planet appeared much clearer, as if they were closer in proximity, while others were fainter and appeared more distant and mysterious.

I adapted the color symbolism found within the art of the pysanky to reveal individual characteristics I assigned for each of my family members. The younger children are depicted in washes of yellow and green (symbolic of youth and hope), they are smaller in size and typically grouped with other siblings. The women in my family I represent in hues of reds, oranges, and yellows for strength, hope and love. The men I distinguished in tones of blue and orange for trust and strength. As mentioned in Chapter 2, red and black tones are commonly reserved for elder generation (Geist 5), specifically the grandparents. The planets that are depicted in only black—for remembrance, are those who have passed on and exist only in our memories.

Installation: Experiencing the Curve

The Rosenwald-Wolf Gallery at the University of the Arts has many positive attributes: ample room, plenty of natural light, and interesting nooks and spaces for display, but the most unique aspect of the gallery is a 29'-long curved wall that extends over 11' in height. It could not have been more appropriate to display *A Cosmic Genealogy*. In close proximity to the piece, the curvature of the wall highlights the difficulty in to experiencing the length of the wall in its entirety as well as view the individual pieces upon the wall as a whole [Figure 14]. These individual sheets are arranged into constellations (composed of over sixty sheets) and span both the width and the height of the wall to suggest that only a this is only one segment of the universe that has been charted. [Figure 15] The wall serves as



Figure 14: *A Cosmic Genealogy*, 2014; Handmade paper, pulp painting, xerox transfer; dimensions variable; *detail* Photo: John Bernardo



Figure 15: *A Cosmic Genealogy*, 2014; Handmade paper, pulp painting, xerox transfer; dimensions variable; *detail* Photo: John Bernardo



Figure 16: *A Cosmic Genealogy*, 2014; Handmade paper, pulp painting, xerox transfer; dimensions variable; *detail* Photo: John Bernardo

a reference to both our inability to perceive the universe in its entirety and to trace our lineage back to a distinctive point in time.

A Systematic Universe

In order to begin to quantify the expanse of the universe, I using a system of planetary classifications found in science and space exploration, to create a system of classifying and organizing the individual members of my extended family. Organizing this particular section of my space, I based my numerical classification on what I have termed, *E-Class Planets* (*E—for Erin*). Determining the planets in my section of discovered space as *E-Class Planets* is inspired by Star Trek's planetary classification system of *M-Class Planets*. The Star Trek franchise created an entire system of grouping planets, *J-Class* for gas giants like Jupiter or *Class-N* for sulfuric planets like Venus, but the *M-Class Planets* are similar to those fitting within a habitable region, (what NASA has termed as the "Goldilocks" zone), a region similar to that of Earth (stexpanded.wikia.com).

The numbering system associated with each planetary body stems from a variation of the individual's "discovery date" (birth date) and maternal or paternal relationship to the central planet *E-0785* (me) [Figure 16]. These planets represent a particular individual in my family, but they have been dissociated from a particular name and have been assigned a specific number in order to suggest that the constellations could be any genealogical family and that we are individual pieces in a much larger genealogical system.

Modeling the Big Bang

Josiah McElheny is another artist who adapts a process rich in tradition, is influenced by the systematic nature of science. Just as I draw on the tradition of

Ukrainian folk arts, McElheny draws on the tradition of glassmaking as central to his exploration of concepts of science and systems. (Art:21)

Drawing inspiration from the explosive-like nature of chandeliers hanging in the Metropolitan Opera House [Figure 17], McElheny was struck by their resemblance to a model of The Big Bang.



Figure 17: *Conceptual drawings for a chandelier, 2005*; Super 16mm color film and digital animation; film still



Figure 18: *An End to Modernity, 2005*; Chrome-plated aluminum, electric lighting, handblown glass, steel cable and rigging; 10' x 15' Photo Sven Kahns

He states his desire to create a sculpture “determined by the actual science of the origin of the universe” (McElheny 60) At first glance *An End to Modernity*, his version of the Big Bang, appears to be a spontaneous explosion of reflected metal, glass and light, [Figure 18] but every aspect of the piece is specific to the Big Bang in its size and placement. Each rod in the piece represents a specific period of time from the origin point. At the end of each rod radiates a cluster of glass spheres, discs, and lights [Figure 19] He assigned each cluster a specific galaxy formation that was occurring at that time and they were represented by either glass or light (McElheny 60).



Figure 17: *An End to Modernity*, 2005; Chrome-plated aluminum, electric lighting, handblown glass, steel cable and rigging; variable dimension; detail Photo Sven Kahns

In his discussions of *An End to Modernity* McElheny speaks of the varying levels of science visible within the piece. He states, “The idea is not that the science would be legible to the viewer, but that injecting so much information would create more vectors for the audience to use and result in an altogether new kind of hybrid object” (McElheny 62). I believe that through such a communion of science and art, one’s intellect as well as emotions are engaged. A Cosmic Genealogy science is infused with the implication of scientific thought through the organization of planets

into groups and numerical classification. This injection of scientific information affects the experience and blurs the line between science and art. While I feel McElheny's aesthetic renderings of the Big Bang are too clean for me, his interest in science and the complexities of his systems inspire me as I move forward in future work.

CONCLUSION

During my time as a graduate student, a shift occurred in my studio practice from a time-consuming, regimented way of working to a more immediate and intuitive approach. I moved from specific processes like the mezzotint to materials and processes, like natural dyes, pulp-painting and experimenting with powdered pigment, baking soda and vinegar, which express an active approach to rendering cosmic imagery.

Also important for my art-making has been my connecting to Ukrainian folk art traditions like embroidery and color symbolism, which has helped me zero in on my personalization of our origins and is one route to a new systematic approach to understanding origins of our universe.

With the introduction of scientific research and influences, the cosmic connection I felt as a child has grown beyond a personal/emotional relationship. During those nights spent under the stars I wanted to understand why I felt a constant tugging within me, why my eyes were consumed with staring upwards. Neil deGrasse Tyson answers the underlying questions I pondered years ago and allowed me to identify those nights spent under the stars in North Dakota as the point of origin to connect with my cosmic heritage. He states:

The spectacular truth is — and this is something that your DNA has known all along — the very atoms of your body — the iron, calcium, phosphorus carbon, nitrogen, oxygen, and on and on — were initially forged in long-dead stars. This is why, when you stand outside under a moonless, country sky, you feel some ineffable tugging at your innards. We are star stuff. Keep looking up.

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Tyson, Neil deGrasse. "10 Questions for Neil deGrasse Tyson." *Time Magazine*. 26 June 2008. Web. 10 February 2014



EDUCATION

Master of Fine Arts, Book Arts and Printmaking

The University of the Arts, Philadelphia, PA
May 2014

Bachelor of Fine Arts, Graphic Design and Printmaking

Minnesota State University Moorhead, Moorhead, MN
May 2010

RESIDENCIES

2010-2011

Minnesota Center for Book Arts, Minneapolis, MN

EXPERIENCE

2013

Conservation Intern - Historical Society of Pennsylvania, Philadelphia, PA

Conservation Intern - American Philosophical Society, Philadelphia, PA

Studio Intern - Bella Forte Bookbinding and Letterpress, Philadelphia, PA

Teaching Experience:

2014

Teacher's Assistant - Book Structures and Concepts with Mary Phalen, University of the Arts

2013

Teacher - Children's Accordion Book Workshop, Philadelphia Center for the Book, Book, Paper, Scissors

Teacher's Assistant - Introduction to Etching and Mono-type with Anthony Rossoti, University of the Arts

Teacher's Assistant - Introduction to Lithography with Patty Smith, University of the Arts

Teacher's Assistant - Introduction to Etching and Mono-type with Anthony Rossoti, University of the Arts

Shop Monitor/Gallery Preparator - University of the Arts, Philadelphia, PA

2012

Teacher's Assistant - Letterpress Continuing Education with Marisha Simmons, University of the Arts

Teacher's Assistant - Introduction to Screen-printing with Laurel Schwass-Drew, University of the Arts

Related Experience:

2014

Letterpress Printer - Letterpress edition for artist Leslie Dill, University of the Arts, Philadelphia, PA *Letterpress Printer*



Letterpress Designer & Printer - Wedding Invitations for Aliese Andersen and John Volk, Philadelphia, PA

2013

Designer and Printer - Holiday Cards, President Sean Buffington, University of the Arts, Philadelphia, PA

Designer and Printer - Letterpress Cards, Advancement Office, University of the Arts Philadelphia, PA

Letterpress Printer - Wedding Invitations for Katy Matich and Kurt Ro, Philadelphia, PA

2012

Designer and Printer - Holiday Cards, President Sean Buffington, University of the Arts Philadelphia, PA

2009 - 2010

Graphic Designer - Fallibility, New Rivers Press, Moorhead, MN

EXHIBITIONS

2014

Point of Origin: Thesis Exhibition - The Rosenwald-Wolf Gallery, University of the Arts, Philadelphia, PA

Granular Exploration: Contemplating Accumulation - The Galleries at Moore, Moore College, Philadelphia, PA

Artists' Book Cornucopia V - Abecedarian Gallery, Denver, CO

Lost then Found: The Wunderkammer - Gallery 1010, University of Tennessee at Knoxville, Knoxville, TN

Skin & Bone: Historical Book Structures & Handmade Tools - University of the Arts, Philadelphia, PA

Here & There, A Postcard Exchange - 6th Floor Gallery, University of the Arts, Philadelphia, PA

2013

Bibliophiladelphia - Philadelphia Center for the Book, Free Library of Philadelphia, Philadelphia, PA

Works in Perception: Exploring Origins & Identity - University of the Arts, Philadelphia, PA

Works in Perception X3 - University of the Arts, Philadelphia, PA

Tawney Continued - University of the Arts, Philadelphia, PA

2012

Out of the Frame, Off the Wall - University of Tennessee, Knoxville, TN

2011

Parts of a Whole - Minnesota Center for Book Arts, Minneapolis, MN

2010

Mythopoeia - Minnesota State University Moorhead Alumni House, Moorhead, MN

Bachelor of Fine Arts - Rolland Dille Center for the Arts, Moorhead, MN

2010 Student Juried Exhibit - Rolland Dille Center for the Arts, Moorhead, MN



2009

9 x 12 - Fort Worth Museum of Art, Fort Worth, TX

Tri-College Bachelor of Fine Arts Recipients - Upfront Gallery, Fargo, ND

2009 Student Juried Exhibit - Rolland Dille Center for the Arts, Moorhead, MN

Bachelor of Arts Exhibit - Rolland Dille Center for the Arts, Moorhead, MN

2008

2008 Student Juried Exhibit - Rolland Dille Center for the Arts, Moorhead, MN

AFFILIATIONS

2013

Guild of Book Workers: Delaware Valley Chapter

Philadelphia, PA

Fine Press Book Arts Association

Southern Graphics Council International

2012 - Present

Philadelphia Center for the Book

Philadelphia, PA

COLLECTIONS

Scott & Caroline Ziegler

Philadelphia, PA

AWARDS

2014

Elizabeth C. Roberts Prize for Graduate Studies in MFA Book Arts/Printmaking

University of the Arts, Philadelphia, PA

Ziegler Purchase Prize

University of the Arts, Philadelphia, PA

2013

Ziegler Purchase Prize

University of the Arts, Philadelphia, PA

ARTIST STATEMENT : THESIS EXHIBITION

I have always felt an innate connection to the night sky. Growing up in western North Dakota where empty space was bountiful and the vastness of the sky was inescapable, I spent countless nights under the stars consumed with a desire to understand more of the universe and my place within it. Astrophysicist Neil deGrasse Tyson describes our connection to the cosmos as programmed into our very being. He states:

There is a fundamental reason why we look at the sky with wonder and longing ... It is something like an ancient wisdom, encoded and tucked away in our DNA, that knows its point of origin as surely as a salmon knows its creek. The genes know, and long for their origin.

I identify those nights spent gazing up at the stars in North Dakota as the point of origin that connects with our cosmic heritage. *Point of Origin* explores not only my thoughts about our origin from the moment of the Big Bang, but also materials that allow me to manipulate and participate in processes that evoke our cosmic descent. Through adaptations from Ukrainian folk art traditions, such as the use of thread, color symbolism, and natural dyes, I speak of a microcosm - a personal, familial heritage that serves as a means to communicate the macrocosm - a lineage that traces every organism back to a common point of origin, the Big Bang.

IMAGE LIST

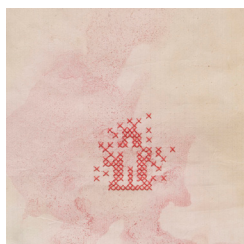
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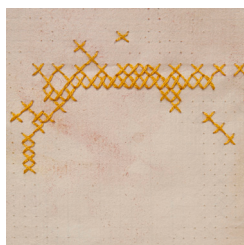
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Xerox Transfer
Variable Dimension
2014



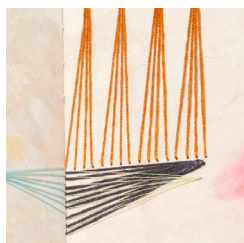
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Cosmic Genealogy
Handmade Cotton/Abaca Paper, Pulp Painting,
Xerox Transfer
Variable Dimension
2014



Malkowski_03.jpg
Sewn Particles
Kitakata Japanese Paper, Natural Dyes, Embroidery Floss
28½" x 22"
2014
Photo: John Bernardo



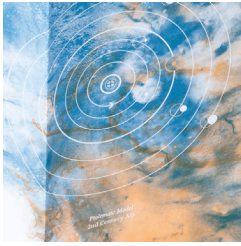
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Sewn Particles
Kitakata Japanese Paper, Natural Dyes, Embroidery Floss
28½" x 22"
2014
Photo: John Bernardo



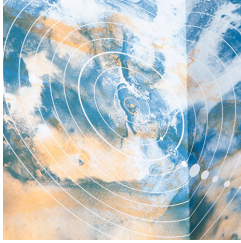
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Contours (After Tawney)
Altered book w/Handmade Paper & Stitching
7" x 4"x ½"
2012
Photo: John Bernardo



Malkowski_06.jpg
Contours (After Tawney)
Altered book w/Handmade Paper & Stitching
7" x 4"x ½"
2012
Photo: John Bernardo



Malkowski_07.jpg
We Float Like Dust
 Offset Lithography
 5.75" x 8.5"
 2013
 Photo: John Bernardo



Malkowski_08.jpg
We Float Like Dust
 Offset Lithography
 5.75" x 8.5"
 2013
 Photo: John Bernardo



Malkowski_09.jpg
Portraits: 5, 24, 82, 679, 713.509
 Handmade Cotton Paper, Vinegar, Powdered Pigment & Baking Soda
 22" x 17¼"
 2014
 Photo: John Bernardo



Malkowski_10.jpg
Portraits: 5, 24, 82, 679, 713.509
 Handmade Cotton Paper, Vinegar, Powdered Pigment & Baking Soda
 17¼" x 22" (Individual Panels)
 2014
 Photo: John Bernardo



Malkowski_11.jpg
Portrait: Prologue
 Handmade Paper, Vinegar, Powdered Pigment & Baking Soda, Xerox Transfer
 12" x 18"
 2014
 Photo: John Bernardo



Malkowski_12.jpg
Chapters: 10, 89, 143
 Natural Dyes, Unryu Japanese Paper, Powdered Pigment & Baking Soda, Vinegar, Handmade Paper
 4" x 6¼"
 2014
 Photo: John Bernardo



Malkowski_13.jpg

Chapters: 10, 89, 143

Natural Dyes, Unryu Japanese Paper, Powdered Pigment & Baking Soda, Vinegar, Handmade Paper
4"x 6¼"

2014

Photo: John Bernardo





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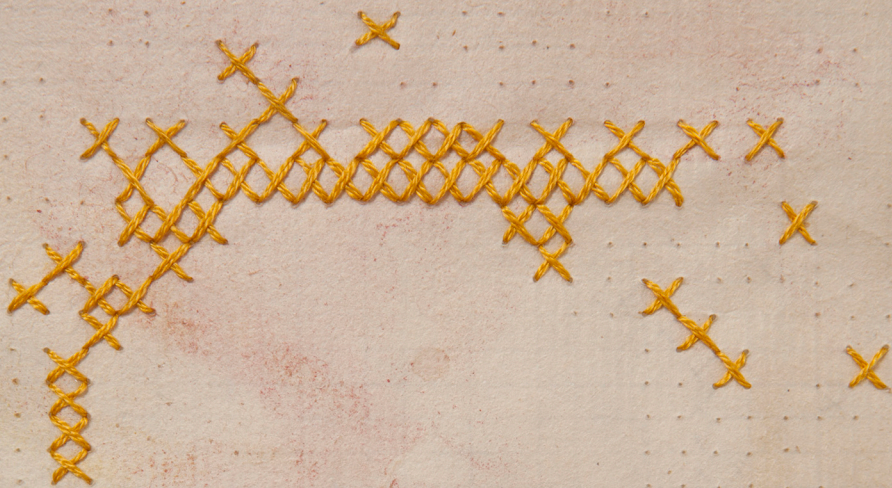


E-M2891



E-K0496











In the last few millennia we have made
the most astonishing and unexpected
discoveries about the Cosmos

and our place within it.
explorations that are exhilarating to consider.

*Ptolemaic Model
2nd Century AD*



Expanding Universe Model
2015 January





Small, illegible text label at the bottom right corner.

We are all made of stardust.

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Chapter: 10, #9, 143
Eiri Malkowski
Natural Dyes, Urnyu Japanese Paper,
Powdered Pigment & Baking Soda,
Vinegar
2014

