Surface and Space

Textile dyeing in Relation to Art and my Practice

Yeltsin Anthony Penado
2017

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Textile dyeing in Relation to Art and my Practice

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Introduction:

This piece reflects upon the importance of textile dying and it's relation to art, culture and my practice. I feel it is important in this paper to highlight natural textile dying because I use these processes in my work. I am interested in natural dyes and textiles because I like the relationship between the materials and their cultural and historical significance. This piece will discuss the significance of fabric dying and natural pigments and how they have become a symbol for specific social and cultural events throughout history. I will focus on natural pigments that come from different regions around the world. The topics discussed in this piece will be separated into sections that have been titled:

Section 1: *Origins: Concerning Dyes, fabrics & fibers, and crop mythology*. what natural dyes, pigments, fibers, fabrics and foods are and where they come from.

Section 2: *Art and color: color and cloth as medium.* This section will highlight artists that have utilized alternative materials in their work. This will also include artists and bodies of work that inspire my practice.

Section 3: *Conclusion: Anti-Matters and beyond.* In this section, there will be a review of textile dying and its relation to my body of work titled: *Anti-Matters*. This section will elaborate on why fiber dying is my medium of choice in relation to art.

I: ***Origins:***

Dyes, fabrics & fibers, foods and crop mythology.

***Concerning Dyes*:**

1. "The Nopal plant that is grown in America and produces *grans* (insect dye)." *Reports on the History, Organization, and Status of Various Catholic Dioceses of New Spain and Peru* (1620-49), Fol. 85. Newberry Library, Chicago (Vault Ayer MS 1106 D8 Box 1 Folder 15)

The world has provided an array of colors from different natural sources that were widely utilized until the advent of synthetic colors. To begin with, what are natural dyes? In Sara Kadolph's article, *Natural Dyes: A Traditional Craft Experienceing New Attention;* there is a brief explanation of the basic sources of natural colors. The article states: "Natural dyes are colors that are derived from naturally occurring sources. Natural dyes and plant-based pigments are colorants that are derived from natural sources such as: plants (indigo, woad, saffron); insects (cochineal beetles and lac scale insects); animals (mollusks or shellfish); and minerals (iron, ochre, and clay). Heat and water are used as a solvent to extract the colors from the dye material." [1] Natural dyes are derived from four main sources: plants, insects, animals and minerals. Natural dyes have been used for thousands of years to dye the body, fibers, clay, baskets, and fibers. The oldest dyed woven fabric materials were found in Peru. This fabric was dyed with indigo and is an approximate 6,000 years old.[2] Natural dyes are abundant around the world and have been used for a very long time as an art material across cultures. We are still discovering new synthetic colors but, natural dyes still have a relevance in the history of art and culture. Sara Kadolph also adds that "color(ing) textiles and other materials were important to almost all historic cultural groups…Archaeological evidence and documentation of materials and practices of anthropologists and others, demonstrate the important cultural role of natural

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[1] Kadolph, Sara. "Natural Dyes: A Traditional Craft Experiencing New Attention." *Delta Kappa Gamma Bulletin*, vol. 75, no. 1, 2008, pp. 14-17*, Research Library*, https://search.proquest.com/docview/218779269?accountid=25324.

[2] BOWER, BRUCE. "Oldest Indigo-Dyed Fabric Found." *Science News*, vol. 190, no. 8, 15 Oct. 2016, pp. 8-9. EBSCO*host*, search.ebscohost.com/login.aspx?direct=true&db=ofs&AN=118456957&site=ehost-live.

colorants."[3] The article suggests that even with the advent of synthetic colors, natural dyes find a new life for people who are interested in 'green' and natural products.

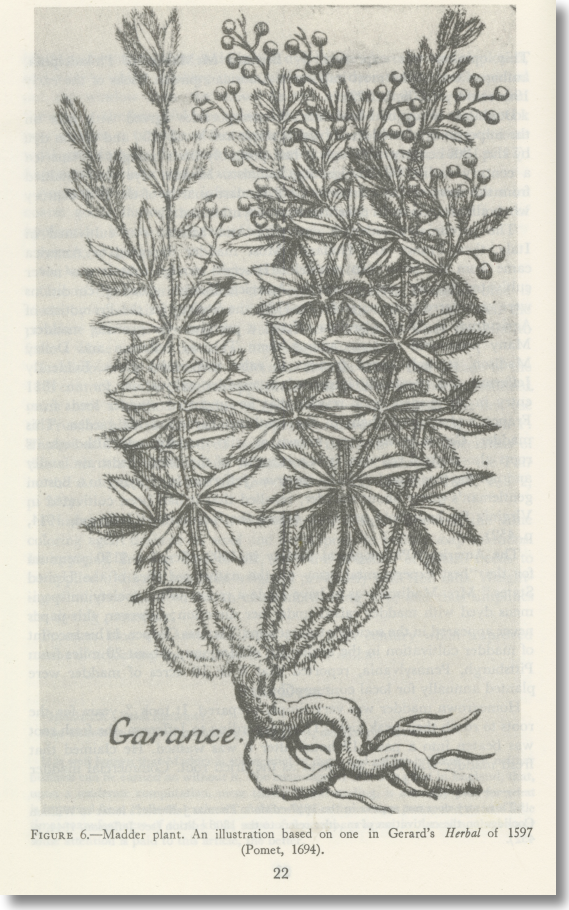

FIGURE 6.—Madder plant. An illustration based on one in Gerard's *Herbal* of 1597 (Pomet, 1694).

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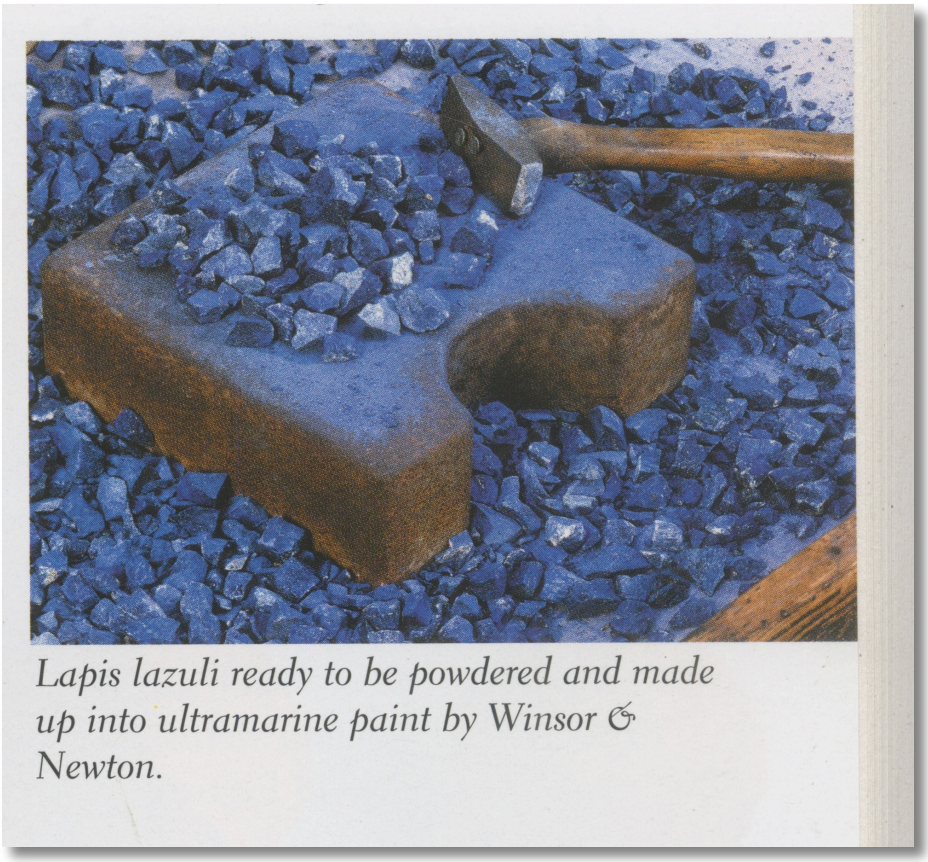
2. Adrosko, Rita J., and Margaret Smith Furry. "Red Dyes." *Natural Dyes in the United States*, Smithsonian Institution Press; 1968, pp. 22.
(An Illustration of a madder plant)

Natural colors have more than an artistic or aesthetic value. The techniques demonstrated and material properties of natural dyes are highly valued by anthropologists and chemists for their role in history. They are also deprived from sustainable and renewable sources that addresses the

[3] Kadolph, Sara. "Natural Dyes: A Traditional Craft Experiencing New Attention." *Delta Kappa Gamma Bulletin*, vol. 75, no. 1, 2008, pp. 14-17*, Research Library*, https://search.proquest.com/docview/218779269?accountid=25324.

pollution issues associated with synthetic dye production. The historical topic of dying is internal to this piece to show the vast span of time these materials have been utilized and cultivated. It is interesting that the natural dyes and pigments are still relevant today even after a fairly long history of use and replacement by synthetic colors. Each specific dye comes from a different part of the earth and is utilized in different ways.



Lapis lazuli ready to be powdered and made up into ultramarine paint by Winsor & Newton.

3. Finlay, Victoria. "Yellow." *Color: a Natural History of the Palette*, Random House Trade Paperbacks, 2004, p. 223. (Image of Lapis Lazuli, a blue mineral pigment)

In my practice, I use natural dyes and pigments. I use these materials because the natural colors fade and change over time. These time-based pieces function as paintings that reference the bright color that once

was. I use this to my advantage to play with the tint and shade of a color on a fabric. Chemical process and time are combined to create a work of art that destroys itself while it creates an image. The materials harvested from the landscape demonstrate the ability to function like a landscape. The natural colors are fragile. Every specific color reflects the landscape it

4.Yeltsin Penado
Untitled (soft sculptures)
2017
Cochineal, acheyote, salt and fabric dye on muslin.

comes from. Each color has a specific purpose in the landscape. I want the viewer to live in the moment and experience my work as it is or was. As the work gradually fades and changes, the viewer will see another living iteration of the piece. Sunlight, as it sculpts the plants in nature; it also functions as a material that develops my image.

Concerning Fabrics & Fibers:

5. *Coventry Tapestry* (Detail) from left to right: King Henry VI, Possibly Duke of Somerset; William de la Pole, Duke of Suffolk; John Capgrave, Court Poet, Cardinal Beaufort (below); Unidentified (above.)

Fabrics and fibers have been a large part of human development throughout history. Like natural dyes, there are different sources of fibers to make fabrics. Fibers are derived from plant, animal and synthetic sources. Coventry is a good example of the importance of fibers and fiber art because it is built into it's heritage and history. Sara Kadolph states that "because of the wide range of colors possible with natural dyes, medieval and cultural dye recipes were carefully protected and rarely recorded so that dyers could maintain a competitive advantage over their competition."[4] This leads to some of the finest fiber works were created for royalty in the 16th century. One example was the complexity of the *Coventry Tapestry* described in Joanne Watson's

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[4] Kadolph, Sara. "Natural Dyes: A Traditional Craft Experiencing New Attention." *Delta Kappa Gamma Bulletin*, vol. 75, no. 1, 2008, pp. 14-17*, Research Library*, https://search.proquest.com/docview/218779269?accountid=25324.

article on the Woad plant. The *Coventry Tapestry* was made for King Henry VI's visit to St. Mary Guilhall's Great Hall. This was an important fiber work because it is the largest tapestry to exist.[5] Entirely dyed with a palette of rare pigments, it is also one of the most well preserved tapestries to exist.

6. Watson, Joanne. "Woad." Piecework 20, no. 4 (July 2012): 28-32. OmniFile Full Text Select (H.W. Wilson), EBSCOhost.
Woad plant in its second year. Photograph by Carol De Rose

The most important color to note on this tapestry was Woad blue; this color was important to defining Coventry. In Joanne Watson's article she mentions that "Silk was woven in coventry as early as 1672. By the end of the seventeenth century, the dying and weaving of wool

[5] Watson, Joanne. "Woad." Piecework 20, no. 4 (July 2012): 28-32. OmniFile Full Text Select (H.W. Wilson), EBSCOhost.

was in decline and silk weaving had become Coventry's main industry."[6] This tapestry was a great display of Flemish craftsmanship and the wealth of the royalty in Coventry. This region in England was defined economically and commercially for it's fabric and fiber trade. The coventry tapestry reflects Coventry's wealth and success. The importance of adding this history of Coventry fabric to this piece, is to show fiber's importance to European history. This is a very valuable piece to the people of Coventry and it is interesting to show how a region can be defined by the trade of dyed fabrics and fibers.

In my work, I consider the fabric and fiber as one of the most important materials. I use two different fabrics, Animal fibers and Plant fibers. Both fibers take colors in a different way and I am able to engage with the adaptability of color on fabric. the plant fibers fade color easily, and the animal fibers hold a dense rich color. The scenery muslin fabric that I use in my paintings, have a specific function that relate to their use in the creation of a false landscape. The muslin fabric I use is a sheet of thin cotton that, that is in expensive and serves many uses. I dye this fabric and stretch it onto stretcher bars that are built to my exact (?) height. Using my body as a cannon, I create a landscape that frays when it is stretched, that has an edgeless frame. The frame which holds the fabric also allows it to flow off the bars. Unlike canvas or linen; Muslin loses it's shape when stretched.Over time, the image changes.

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[6] Watson, Joanne. "Woad." Piecework 20, no. 4 (July 2012): 28-32. OmniFile Full Text Select (H.W. Wilson), EBSCOhost.

***Concerning Foods*:**

7. *Landscape, Milpa Alta*
Jean Charlot
1924
Painting.
Museum of Modern Art

Along with the trade of natural colors and fibers. The trade of foods, export, and proper harvesting of foods have been vital to the establishment of colonies in the Americas. Anthropology results from the University of San Carlos stated that "The traditional Swidden (farming) system practiced in Peten, Guatemala; closely resembles pre-spanish Milpa farming."[7]

[7] "Science; New Anthropology Study Results from University of San Carlos Described (SWIDDEN COUNTS: A PETEN, GUATEMALA, MILPA SYSTEM Production, Carrying Capacity, and Sustainability in the Southern Maya." *Science Letter*. 01 May. 2015 *eLibrary*. Web. 2 Nov. 2017.

This finding suggests that traditional farming practices were utilized by the Spanish in their conquest of mesoamerica. This also alludes to the fact that contemporary farming techniques are still utilizing the principals created by the natives of the region. In the article *Sowing The Blood With The Maize: Zapotec Effigy Vessels and Agricultural Ritual*, it describes how farming practices were spiritually and conceptually tied to the Zapotec people. The author Adam T. Sellen analyzes the iconography of different types of classic period Zapotec ceramic vessels. These ceramic vessels were conceptually linked to Zapotec religious practices. In this article Sellen states that the iconography shows "there is evidence from effigy vessels, historical sources and ethnographic studies that the Zapotec offered animal and human blood rituals related to maize, a practice widely documented for other ancient and present-day Mesoamerican communities… linking these two observations, maize and blood were elements in ancient Zapotec religions practices."[8] This article suggests that farming to the Zapotec was valued on a spiritual and conceptual level. The Milpa from of farming was very important to the Zapotec people for practical and spiritual reasons. Adam Sellen also mentions the conceptual value of blood letting rituals and their connection to farming practices: "The main theme involved in the ancient representations was fertility, underscored by a sacred pact forged between humans and the gods associated with sustaining the growth cycle of this important plant. The element that connected sacred beings with humans was blood, the vital liquid that stimulated fertility and that had to be

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[8] Sellen, Adam T. "SOWING THE BLOOD WITH THE MAIZE: ZAPOTEC EFFIGY VESSELS AND AGRICULTURAL RITUAL." *Ancient Mesoamerica*, vol. 22, no. 1, 2011, pp. 71-89*, Research Library*, https://search.proquest.com/docview/896342070?accountid=25324, doi:http://dx.doi.org/10.1017/S0956536111000095.

spilled to insure the continuity of life."[9] it states that blood is spiritually connected to the fertility of the plant. This blood letting practice was common in mesoamerica for a very long time before The Colonial Era. This offer was done to symbolically feed the earth to ensure the continuance and abundance of crops. Crops were important to the indigenous people of the mesoamerica and this helped their societies flourish before the colonial era. The story of the Zapotec milpa farmers was important to this piece piece because it talked about the spiritual significance of the mesoamerican farming technique.

I chose this article of the Zapotec Milpa Farmers for a few reasons. I find it interesting that in my culture's mythology: there is an emphasis on the passage of time; the sun and moon and the relation to earth and the people. The Zapotec, had a direct connection to the earth with blood. One of the materials I use is cochineal, which is a dye made from the blood of a small scaled insect that thrives on Nopal cactus. It is an alizarin red that is harvested boiling the dried/ crushed beetles in a non-reactive metal pot. The fabric is given brine bath of salt and alum (pickling salt), and dipped into the cochineal dye bath. This color makes a deep red on wool and a pink/purple on cotton. I have started using this, and other living organisms in my work because because I believe, if the earth is connected to the art, the art should be connected to life. As the colors and fabrics change over time, the work lives and breathes through natural causes.

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[9] Sellen, Adam T. "SOWING THE BLOOD WITH THE MAIZE: ZAPOTEC EFFIGY VESSELS AND AGRICULTURAL RITUAL." *Ancient Mesoamerica*, vol. 22, no. 1, 2011, pp. 71-89*, Research Library*, https://search.proquest.com/docview/896342070?accountid=25324, doi:http://dx.doi.org/10.1017/S0956536111000095.

2: Art and color: color and cloth as medium.

8.*"Paper Suit | James Rosenquist, | 1966.431.1a-e |* Work of Art | Heilbrunn Timeline of Art History | The Metropolitan Museum of Art." The Met's Heilbrunn Timeline of Art History. N.p., n.d. Web. 29 Oct. 2017.

The image above is of James Rosenqusit wearing a suit made from paper. It is at first glance comical but also very intruiguing. In Artforum Internation, Michael Lobel writes an

interesting article on Rosenquist stating that "(his) paper suit spoke to many of the central concerns treated in his paintings of the time. It reflected on a culture of disposability and planned obsolescence at the same time that it called attention to the lure of novelty and fashion (paradoxically, people took note of the outfit precisely because of its banal material)."[10] I find it interesting that Rosenquist wears a paper suit to seemingly bring the attention to temporality and fragility of artwork and society. As a Pop Artist, Rosenquist seemed to have a dialog with waste and consumerist culture. This is very relevant today with the re-use of natural dyes. In Sara Kadolph's Article she talks about how natural dyes are renewable and sustainable, stating: "with the ever-increasing interest in free products, low carbon-footprint lifestyles, and environmentally friendly consumerism, there is an escalating interest in natural products, including natural dyes."[11] In relation to the idea of temporality and alternate use, I believe that Rosenquist was considering the ill-effects on natural resources as a result of consumerist culture. Another interesting point that Michael Lobel brings up is: "On several early occasions, Rosenquist completely repainted works he had already exhibited or destroyed works outright"[12] I find it interesting that Rosenquist's body of work constantly shifts and does not exist as a static object. I get a feeling of fragility and narrative from this aspect of his work. Lobel also mentions an art piece that is "fifty-one individual panels that when comprised made an eighty-six-foot-long

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[10] Lobel, Michael. "Sign Language." *Artforum international.*, vol. 42, no. 2, 10, 2003, pp. 126-126,128*, Research Library*, https://search.proquest.com/docview/214342216?accountid=25324.

[11] Kadolph, Sara. "Natural Dyes: A Traditional Craft Experiencing New Attention." *Delta Kappa Gamma Bulletin*, vol. 75, no. 1, 2008, pp. 14-17*, Research Library*, https://search.proquest.com/docview/218779269?accountid=25324.

[12]Lobel, Michael. "Sign Language." *Artforum international.*, vol. 42, no. 2, 10, 2003, pp. 126-126,128*, Research Library*, https://search.proquest.com/docview/214342216?accountid=25324.

painting that was originally intended to be sold off individually, thus effectively destroying the work as a unified whole."[13] In this piece Rosenquist creates a piece that will never be seen or exhibited the same way again. This ties into the idea that Rosenquist is able to work in a way that defies conventional painting. The work does not stay conceptually or physically static. The piece exists in a liminal format on almost every occasion. Rosenquist's materials reflect the use and exhibition of his work.

9. Sigmar Polke *Boredom Loop (Langeweileschleife)*
1969, tape, dimensions variable

Sigmar Polke's *Boredom Loop* is another interesting piece that utilizes very minimal principals and materials. In the article *A Contemporary Visionary* Mark Godfrey simply says: "The idea of time wasting also connects to boredom. What you make of Polke's Boredom Loop

[13] Lobel, Michael. "Sign Language." *Artforum international.*, vol. 42, no. 2, 10, 2003, pp. 126-126,128*, Research Library*, https://search.proquest.com/docview/214342216?accountid=25324.

from 1969, where he stuck awkwardly curved stretches of masking tape on his studio wall and photographed, them with the word."[14] This article brings up an interesting point that this work although very minimal, references a very psychological and almost ritualistic use of materials. The work was named Boredom Loop which was also very interesting; the title describes what the piece is and what it does. The functionality of this piece exists on the wall as something that represents itself. In the same article Peter Doig says: "as an artist, if you are always just receptive to the things with which the world entertains you and make your work in response to them, then for me that's not so interesting"[15] This is an interesting way to address a seemingly careless aesthetic. Polke used materials that were non-traditional to create a piece that will never exist the same way again. I find that Polke's use of materials is resourceful and he uses tools that serve a different purpose and installs them in an unconventional way. I connect this to the way that Adam Sellen was describing the tools that the Zapotec people used in their agricultural blood letting rituals: "specialized cutting and perforating tools used in the act, such as obsidian blades, stingray spines, and shark's teeth. The method of using a cord, made from perishable materials, would probably not show up in the archaeological record."[16] This is interesting because the Zapotec people were very resourceful and specific in their use of materials in their gardening practices. I think there is a performative aspect to the creation of objects and tools to facilitate the

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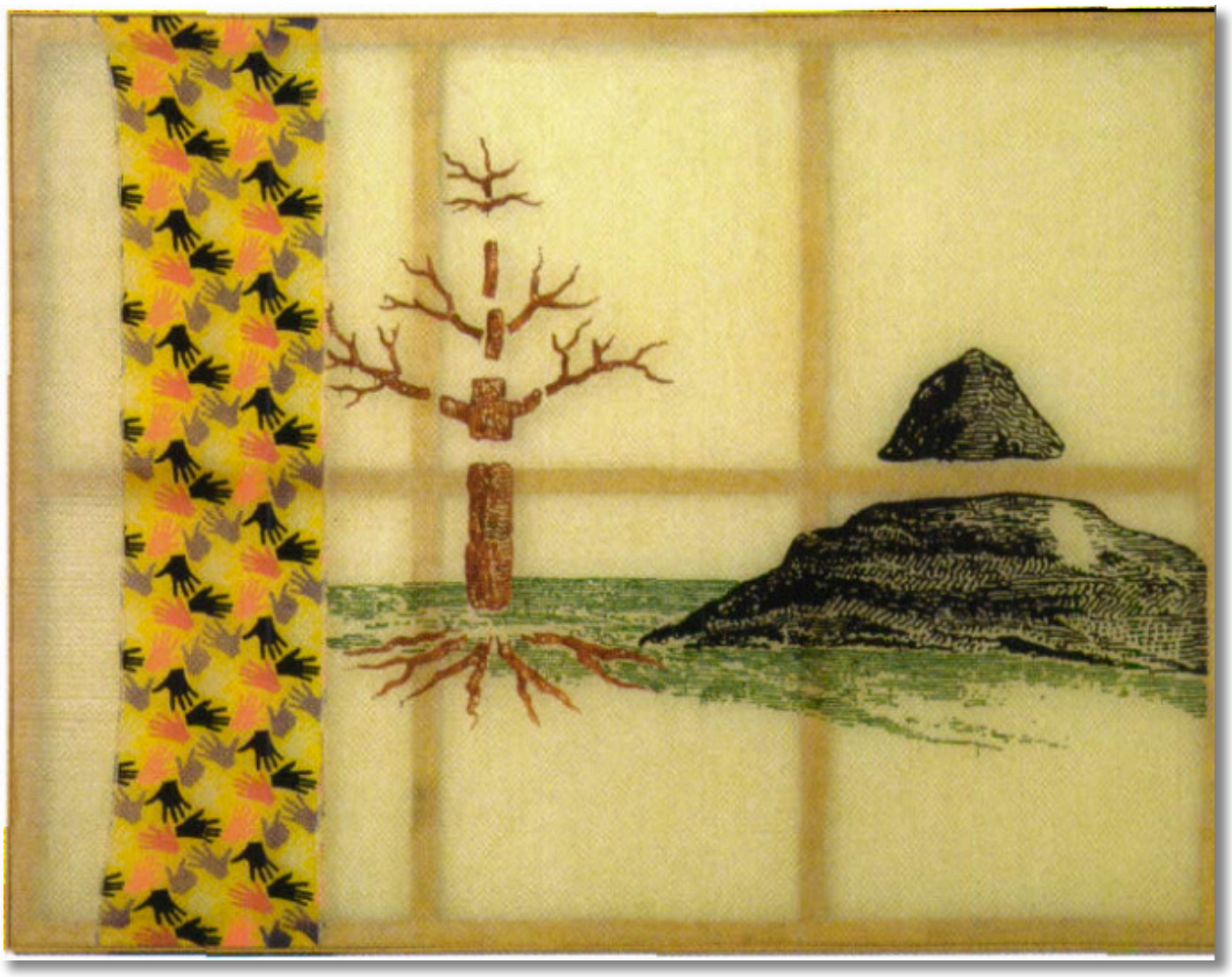
[14] Fischli, Peter, Peter Doig, and Mark Godfrey. "A Contemporary Visionary." *Tate Etc.*, no. 32, Autumn, 2014, pp. 48-61,11*, Research Library*, https://search.proquest.com/docview/1566202577?accountid=25324.

[15] Fischli, Peter, Peter Doig, and Mark Godfrey. "A Contemporary Visionary." *Tate Etc.*, no. 32, Autumn, 2014, pp. 48-61,11*, Research Library*, https://search.proquest.com/docview/1566202577?accountid=25324.

[16] Sellen, Adam T. "SOWING THE BLOOD WITH THE MAIZE: ZAPOTEC EFFIGY VESSELS AND AGRICULTURAL RITUAL." *Ancient Mesoamerica*, vol. 22, no. 1, 2011, pp. 71-89*, Research Library*, https://search.proquest.com/docview/896342070?accountid=25324, doi:http://dx.doi.org/10.1017/S0956536111000095.

practice of sacrifice. Sigmar Polke sourced his materials in a very specific way to create a work that demonstrates his idea. Polke works directly on the wall and uses it as the plane for the tape to exist, the piece acts as an improvisation.



10. Sigmar Polke
The Three Lies of Painting
1994, Resin and Lacquer on polyester canvas

The Three Lies of Painting is one of my favorite paintings that Sigmar Polke has made. In the *A Contemporary Visionary* article Mark Godfrey mentions that Polke: "Began to experiment a lot more with pigments, doing research about historical ones that were no longer used. Theres a film of him boiling up snails in order to get snail dye. And quite famously he used this violet

pigment that turns to a kind of bronze when you burnish it."[17] What I think Mark Godfrey is saying is that Polke had continued with his use of alternative materials to create a piece that references itself again. It is interesting that he was branching out to natural dyes that are no longer being used. The purple snail dye he was using was also described in an article written by Matthew James, he describes Tyrain Purple as: "…None other than the renowned Tyrain purple(Royal purple)..which was to have such an influential career coloring the clothing of the powerful."[18] Sigmar Polke was using Tyrain Purple which is also called royal purple. It is interesting that he is using materials that are not commonly known and is creating them himself. Polke seems to be interested in making work from scratch. In the *Three Lies of Painting*, Polke shows the stretcher bars through the polyester canvas; the constructed elements of the painting are revealed. Polke also uses a prefabricated material to stick on top of the left end of the cavas which stretches across the canvas covering the bars. The materials are the painting rather than a painting functioning as an art piece like a portal. Polke's paintings become objects rather than paintings.

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[17] Fischli, Peter, Peter Doig, and Mark Godfrey. "A Contemporary Visionary." *Tate Etc.*, no. 32, Autumn, 2014, pp. 48-61,11*, Research Library*, https://search.proquest.com/docview/1566202577?accountid=25324.

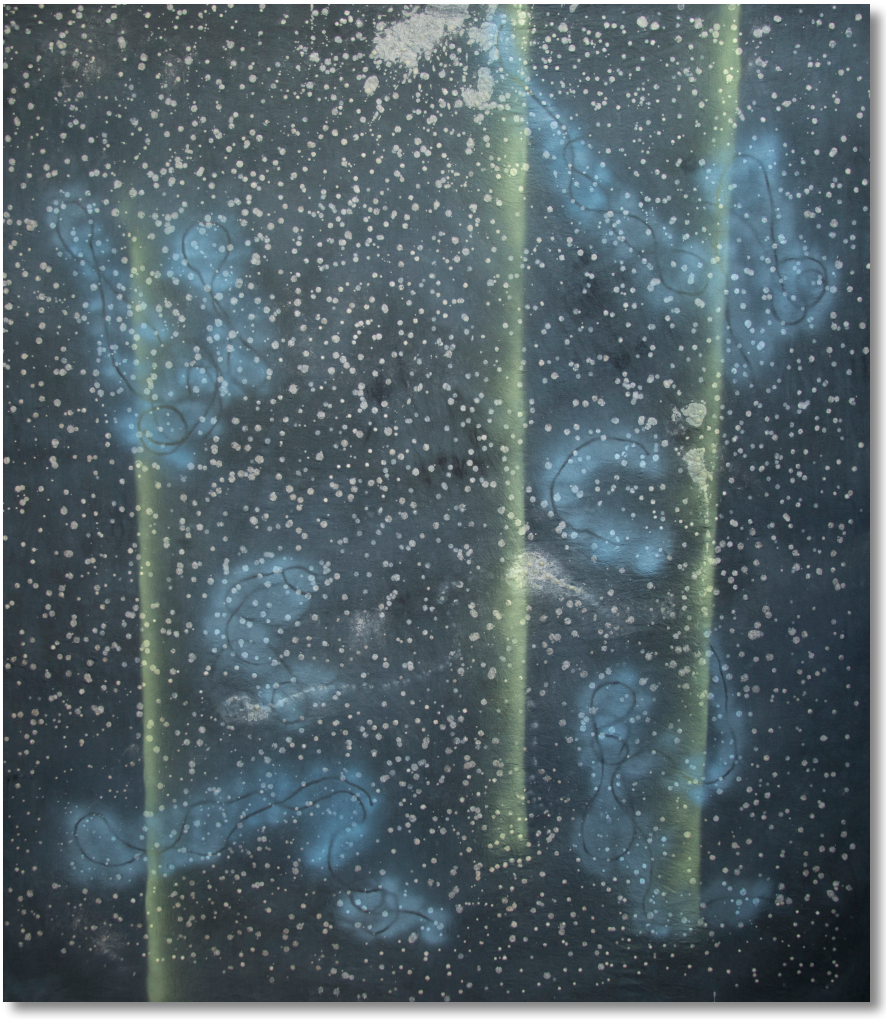
[18] James, Matthew A., et al. "High Prestige Royal Purple Dyed Textiles from the Bronze Age Royal Tomb at Qatna, Syria." *Antiquity*, vol. 83, no. 322, 2009, pp. 1109-1118*, Research Library*, https://search.proquest.com/docview/217556288?accountid=25324.

3: Conclusion: Anti-Matters and beyond.

11. Yeltsin Penado
Surface and Space
2017, 72” x 69.5”
Fabric dye, salt, and cyanotype on scenery muslin.

My work uses natural dyes, pigments and chemical processes on different types of fabrics and fibers to tell different narratives. The narratives are created specific materials are mixed together. In the *Anti-Matters* body of work I have explored different chemical processes as a method of creating new colors through the combination of historical colors. I employ an "all-over" type of formalist landscapes on canvases that are built to almost fit a square shape. The shape and size of the canvas resembles my build and they have a direct connection to my body.

Surface and Space is a piece that was created though very specific conditions. I first added the scenery muslin to a fixative bath of salt and collagen crystals. The salt is a medium that helps the dye attach to the fabric. The dye is then added to hot water mixed with collagen crystals; the collagen removes the hard minerals from the water and reduces streaking when the dye is applied to the fabric. The fabric is then dipped into the dye bath. The light purple muslin fabric is then then dried. When fully dry the purple fabric is then placed into a darkroom. The cyanotype chemicals are then mixed (a mixture of ferric ammonium citrate and potassium ferrocyanide.) the fabric is then coated with the chemical mixture and left to dry in the darkroom. I then waited until it was noon and the sun was directly located ahead. I then exposed the fabric (with chemicals embedded within) to the open sky. The image then capture two sculptures I had arranged on the surface and it also captured the wrinkles found in the scenery muslin. This piece serves as three images. The image of the sky, the image of the sculptures, and the image of the surface, the purple dye and the blue illusion on top. These materials were all combined in a process that created a new color under very specific conditions.



12. Yeltsin Penado
Contact
2017, 72” x 69.5”
Encaustic resist, spray-paint, string, salt and fabric dye on muslin.

This piece is called *Contact* because of the process it uses. Although the materials adhere on the surface, they avoid each other. The materials in this piece were chosen to repel each other but still be able to adhere to the muslin. The muslin is stretched lightly so it hangs off the stretcher bars. The stretcher bars are rounded shaping the canvas in such a way that hugs the wall. The size of the canvas is also the relative to the size of my body. This piece is a darker tone to relate to the theory of anti-matter, something we cant see but exists everywhere in the

universe. The plane of the piece moves with the air in the room. *Contact* was also created through a very specific process. First the muslin fabric was stretched in its raw form. Bees wax was then mixed with paraffin wax and dammar crystals, these items were placed into a metal pot and heated. When the mixture was melted, it was dripped upon the tightened stretched canvas and left to dry. The canvas was then taken off the stretcher bars and dyed with blue then black dye. The dyes were mixed with salt and collagen to adhere to the fabric that hasn't been exposed to the drips of wax. The wax resists the layer of dye that is applied to the muslin. Once the piece is dry I drop a piece of hemp on the fabric in random formations and make stencils out of the formations that they create. The negative is then used as the image on the piece. The image is built by materials that are repelling each other creating a landscape that is not formally tangible, like space.

to conclude Section 1: Origins covered my thoughts and notable findings concerning Dyes, fabrics & fibers, and crop mythology. what natural dyes, pigments, fibers, fabrics and foods are and where they come from. In Section 2: Art and color: color and cloth as medium. This section highlighted artists that have utilized alternative materials in their work. This will also include artists and bodies of work that inspire my practice. Section 3: Conclusion: Anti-Matters and beyond. In this section, there was a review of textile dying and its relation to my body of work titled: Anti-Matters.

Bibliography

Image Citation:

1. “The Nopal plant that is grown in America and produces *grans* (insect dye).” *Reports on the History, Organization, and Status of Various Catholic Dioceses of New Spain and Peru* (1620-49), Fol. 85. Newberry Library, Chicago (Vault Ayer MS 1106 D8 Box 1 Folder 15)

2. Adrosko, Rita J., and Margaret Smith Furry. “Red Dyes.” *Natural Dyes in the United States*, Smithsonian Institution Press; 1968, pp. 22. (An Illustration of a madder plant)

3. Finlay, Victoria. “Yellow.” *Color: a Natural History of the Palette*, Random House Trade Paperbacks, 2004, p. 223. (Image of Lapis Lazuli, a blue mineral pigment)

4.Yeltsin Penado Untitled (soft sculptures) 2017

Cochineal, achiote, salt and fabric dye on muslin.

5. *Coventry Tapestry* (Detail) from left to right: King Henry VI, Possibly Duke of Somerset; William de la Pole, Duke of Suffolk; John Capgrave, Court Poet, Cardinal Beaufort (below); Unidentified (above.) This is an image of the *Coventry Tapestry*, the colors are completely made from natural dyes. This is an impressive display of craft and resources. This tapestry was made for King Henry VI’s visit to St. Mary Guilhall’s Great Hall. It employs the use of the pigment found in his keep.

6. Watson, Joanne. "Woad." Piecework 20, no. 4 (July 2012): 28-32. OmniFile Full Text Select (H.W. Wilson), EBSCOhost.

Woad plant in its second year. Photograph by Carol De Rose

This image is of the woad plant in a weaver's dye garden located in Coventry, England. It is tall with flowers and seed pods. The plant is small and bushy it's first year and is also harvested for it's dye. This shows what the woad plant looks like. It was largely traded, cultivated and harvested as a blue color for centuries until the invention of synthetic dyes.

7. *Landscape, Milpa Alta* Jean Charlot, 1924, Painting, Museum of Modern Art

8."Paper Suit | James Rosenquist, | 1966.431.1a-e | Work of Art | Heilbrunn Timeline of Art History | The Metropolitan Museum of Art." The Met's Heilbrunn Timeline of Art History. N.p.,n.d. Web. 29 Oct. 2017.

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1969, tape, dimensions variable

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Citations:

1. Ames, Matthew A., et al. "High Prestige Royal Purple Dyed Textiles from the Bronze Age Royal Tomb at Qatna, Syria." *Antiquity*, vol. 83, no. 322, 2009, pp. 1109-1118*, Research Library*, https://search.proquest.com/docview/217556288?accountid=25324.

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This article reports a recent find: a 6,000 year-old woven cotton material was found in Peru. This is an amazing find because we are seeing natural dyes being used in south America so long ago. Before that, the earliest use of indigo dye was found in Egypt, dated to be around 4,400 years-ago. This shows evidence that indigo was cultivated around the world and the dye process was also developed independently. The dye process is very complicated and involved a several step process to extract the color from the dye plants.

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This is an article about the plant Isatis Tinctoria or “woad”. The Woad plant is associated with Coventry, England and is sometimes referred to as Coventry Blue. This article

describes the cap making industry in Coventry and the cap making guild that was developed through their economy. The trade of Coventry yarns were woven in Flanders for a tapestry completed in 1500 to decorate a wall in St. Mary Guildhall's Great Hall for the visit of King Henry VII. During the Middle Ages, yarns for hats were dyed with madder root, woad, and black walnut hulls. Typically, Males wore hats that were colored and Females wore their hats without any dye. It is interesting that there was a distinct connection between gender and color through fashion.