ABSTRACT

Elizabeth Tallmadge

As an artist, I am inspired by natural processes and forms, but do not explore them in a scientific way. Instead of creating representations of them, my work remains abstract. I work intuitively, and the images ultimately come from my own imagination. Natural systems such as tissues develop from individual units that multiply into more complex structures. As these replications grow, mutations occur, disrupting the process leading to unpredictable results. The repetitions and mutations eventually create complex patterns and forms that we can see. However, the internal units and processes that form the external bodies remain invisible to the naked eye.

My work consists of drawings, sculptures, and installations that have both two-dimensional and three-dimensional qualities. In order to create the feeling of a natural system I work very repetitively, always building off of small units. The work draws attention to the mutations that come about through repetition. While I started just focusing on natural growth, creating mutations by changing the patterns in my drawings, as I began to work more dimensionally the mutations came about through how I altered the form of the materials. I began to use processed materials made by a manufacturer or processed myself. The materials I make include: handmade paper, paper pulp, cooked kozo (paper mulberry bark), cranberry sauce, and spun wool. The industrial materials include: plaster cloth, chicken wire, wire, honey, corn oil, pencil, pen, and ink. Combining materials, such as hand-spun yarn with manufactured wire or honey with dried handmade paper, formed contradictions that came to represent the mutations.

These contrasting materials created tension in the work through oppositions that included: order versus chaos, growth versus decay, outside versus inside, small versus large, soft versus hard, and wet versus dry. However, my work at the same time strives to achieve a balance between these conflicting forces. While there is a focus on the internal structures that create organisms, the sculptures as a whole form into individual complex organic bodies. The work gives off an ephemeral, weightless, but also growth-like quality to mimic the feeling of something living. Recent installations have illuminated an emotional charge that results from the realization that, while organisms live and grow they eventually decay and die.
Inventing Nature: Creating through Repetition

Elizabeth Tallmadge

Department of Art and Art History
Mount Holyoke College

Art Studio Honors Thesis
2013
ACKNOWLEDGEMENT

I would like to thank the art department faculty: Rie Hachiyanagi, Tatiana Ginsberg, Joe Smith, Matt Phillips, and Nancy Campbell for supporting me in my thesis work. I would also like to thank the art department staff. Jenny Pyke, my outside advisor who helped me become more confident in my writing. Bob Riddle and Brian Kiernan who helped me install my work as well as the entire museum staff. I would also like to thank my family and fellow thesis peers for their moral support. I could not have done this work without any of these wonderful people.
TABLE OF CONTENTS

PART I: Artist’s Analysis

PART II: Images of the Artwork
We often overlook the small details in nature such as creases on our hands, circular algae that float on the surface of ponds, or hexagonal honeycombs in beehives. While we can see these elements with the naked eye, there are also similar internal patterns that function as connecting systems, which make up plants as well as our own bodies. My work heightens and brings to the surface these internal structures and processes that result in something physically whole, yet still made up of small things. Though I am influenced by what I perceive in nature, the work comes from my own imagination and is not meant to be a literal representation of natural forms; it consists of drawings, sculptures, and a combination of both that become installations. In making two-dimensional and three-dimensional art I am able to play with the idea of the internal and the external. One can think of the skin, which is the biggest organ in the body, as made up of tissue cells that form from repeated single units: the cells represent the internal while the overall organ is the external.

Many of my installations are made in corners, which enables me to work two-dimensionally on the wall but also provides space to work three-dimensionally. In addition the work has an ephemeral quality: the structures in the pieces appear to grow but also decay based on the materials used. These materials have been either made into a new form by myself from their raw state or have been processed through manufacture. The raw materials that I process consist of handmade paper, paper pulp, cooked kozo (paper mulberry bark), cranberry sauce, and yarn. The manufactured materials include: chicken wire, wire, plaster cloth, honey, corn oil, pencil, pen, and ink. Working with these different materials has made me more aware of the opposing qualities in nature: order versus chaos, growth versus decay, outside versus inside, soft versus hard, small versus large, etc. My work takes advantage of the texture and smell of these
materials, such as the yarn being soft, wire being hard and sharp, honey being sweet and sticky, and rotting kozo smelling musty and feeling mushy, to bring this principle of opposition to life.

As an artist, I also manipulate the material by altering its form to make it look more organic. It is important to note that I am not trying to display the truth about nature through these pieces but rather to explore the mysteries created by opposing forces. Keeping an ambiguity or mystery about nature means that one doesn’t get overwhelmed by it, and this is helped by making the work from the imagination. In the eighteenth and nineteenth centuries, writers explored ways to represent real life on the page through a new form, the novel. However, to do this they still needed to manipulate the form, which became a problem in portraying the real. Ultimately, even though the novels relate to what happens in real life, the stories are still created by an author, which makes them imaginary. This shows that there is a crucial difference between the real and what is imagined as the real. You can’t make an exact replica of what already exists. It is the same with visual art, which imitates rather than reproduces, often focusing on some aspect or portion that is real. As the nineteenth century novelist George Eliot explained in *Middlemarch*:

> I at least have so much to do in unraveling certain human lots, and seeing how they were woven and interwoven, that all the light I can command must be concentrated on this particular web, and not dispersed over that tempting range of relevancies called the universe. (132)

Eliot expresses that she can only focus on a “particular web” in order to dive deep into the lives of certain characters. Even while it is true that everything feels connected to everything else, she can’t tackle the whole universe; it would be overwhelming. Like Eliot I am exploring a “particular web” or aspect of nature — that is, how it recreates itself — yet one can’t understand this without looking at how it can be destroyed.

I started out with this idea of growth just in my drawings. They are done on a smaller scale using handmade paper, and are drawn with materials that include pencil, pen, pins, and honey.
They illustrate movement by the alteration of patterns in the size, speed, and subtlety of the marks, as well as how much they cover up the page. As an artist, by making these alterations I am creating mutations within the repeated shapes. These drawings demand a close observation that is meant to suggest a microscopic view. The images either float on the surface or seem to be imbedded into the paper by becoming so light that they disappear. Recently, my drawings have been influenced by my large installations, so that they become more like tiny organisms that are created by patterns rather than just depictions of the patterns themselves.

Originally, when my work was still just exploring growth, by accident I left the plant fiber (kozo) in the fridge too long, and it started to rot. Kozo is a tan long reed-like fiber that comes from mulberry trees and is used to make handmade paper. As I was pinning the wet kozo in a corner and draping the strands over one another, they kept falling on the floor. As the kozo dried, it looked like a deteriorating fishing net that was barely holding itself together. The sections without the pins were more three-dimensional, creating a contrast in how the piece could be suspended and still look like it was going to fall to the floor. This experiment helped me appreciate how growth and decay are bound up with each other in nature, and how opposing forces provide the tension and balance that are ultimately necessary in a living system. Samuel Taylor Coleridge, a nineteenth century British philosopher and poet, alludes to this life cycle in one of his essays on nature:

> … every living object in nature exists as the reconciliation of contradictions, by the law of Balance. … The vital principle of the Plant can make itself manifest only by embodying itself in the materials that immediately surround it, and in the very elements, into which it may be decomposed, bears witness of its birth place & the conditions of its outward growth. (Halmi, Magnuson, and Modiano 599)

Coleridge is expressing that “living objects” are able to show a “law of Balance” since in order for them to decompose they must also grow. My installation *Decay versus Gravity* illustrates
decay, but the fact that it is also defying gravity gives the viewer a sense that it used to be
growing; therefore it suggests a natural, organic object.

Like *Decay verses Gravity*, the sculpture *Contaminant* also illustrates death and decay. The
piece is very small, shaped out of a thin metal rod that is then covered and wrapped over with
cooked *kozo* strands. The sculpture’s circular form is irregular with a flat oval-like shape on one
side. Small white pieces of torn *kozo* paper are glued to the circular part and then painted with
honey and cranberry sauce. Even though the circular shape is covered, there are many small
spaces where you can see through to the inside of the form. The honey and cranberry sauce give
off a wet and shiny quality that mimics a parasite growing on another organism: just as the
parasite would exploit and degrade its host, these moist materials would eventually break the
sculpture down, and it would decay. A parasite, though a separate organism, reacts like a
mutation when it attaches and feeds off another, causing a disruption in the natural system of its
host.

For my next work, still focusing on combining oppositions, I wanted to find a way in which
these elements of growth and decay could be integrated so that they would not seem separate. In
the installation called *Hive*, another reed-like plant, *gampi*, that is thinner and produces a creamy
color in paper, is glued to the corner and left side of the wall with methylcellulose (paper glue),
and small hexagons are drawn on them. This middle section is connected to a chicken wire
volumetric form that is covered with cotton paper and honey. The form extends downward and
the cotton paper and honey thin out until just the wire is showing. At the bottom the wire is
reconnected with *gampi* paper and honey from the middle piece. The honey and the drawn
hexagon shapes on the *gampi* create a unity between the paper and the wire. The drawn hexagons
viewed from behind the wire mimic an internal structure to the more formally shaped wire in
front of it. In this piece there is a sense of weightlessness and lightness. It hovers above the ground on the wall and does not seem to be anchored. This weightlessness allows the material to give off a sense of movement and flexibility. *Hive*, though not meant to be literal, does give off the sense of a beehive. Bees build their own environment in which they live; they create their own systems.

During the 1950s and 60s artists who created simple geometric forms in their work were labeled as Minimalists. One was artist Eva Hesse whose works I have greatly admired. Minimalism has been described as an organized principle, relating to postwar America, displaying the fewest possible resources, and emphasizing the difference between masculine and feminine. Yet one of the most renowned minimalists, Sol LeWitt, took a skeptical view, “… People refer to me as a Minimal artist but no one has ever defined what it means or put any limits to where it begins or ends, what it is and isn’t” (Meyer 3). LeWitt argues that because critics have defined the term differently, there isn’t a clear understanding of its meaning. Since minimalist artists were mostly men, these formal, logical, ordered structures ended up being implied as masculine. Linda Nochlin an art critic, stated that in general women artists’ works have been labeled by gender: “Clearly, there is a tendency in the critical discourse to equate the feminine and the “chaotic,” whether the latter is seen as a negative or positive characteristic” (Sandler 15). This view of taking on gender roles has been associated with minimalism often enough to make it repulsive to many viewers. Hesse’s work is often thought of as a critique of Minimalism because it displays an order with an organic sensibility. By working in units I found that I couldn’t have discovered chaos without order in my art.

Hesse’s work, unlike those of others labeled minimalists, has an organic quality, which is caused by the contradictions she creates. Hesse mentioned that:
In the forms I use in my work the contradictions are certainly there. I was always aware that I should take order versus chaos, stringy versus mass, huge versus small, and I would try to find the most absurd opposites or extreme opposites… I was always aware of their absurdity and also their formal contradictions and it was always more interesting than making something average, normal, right size, right proportion… (qtd. in Shearer)

Here Hesse relates contradiction to absurdity. Opposing elements create contradiction for her. An example of this is in her *Accession* pieces, cube-like structures that appear ordered with twisted wire on the outside but inside the wire is poking out, thus creating order and chaos at the same time. My work draws on the aspect of singularity and sameness in minimalism through the repeated shapes and the process of building up a work from a single unit. However, by letting mistakes or mutations occur in the patterns, I create contrast. This causes a disconnect in material which adds complexity to the work. Hesse also talked about repetition as a way of creating meaning:

> If something is meaningful, maybe it’s more meaningful said ten times. It’s not just an aesthetic choice. If something is absurd, it’s much more absurd if it’s repeated… I don’t think I always do it, but repetition does enlarge or exaggerate an idea or purpose in a statement. (qtd in Shearer)

Here she is explaining that the more you repeat something, the more absurd it becomes. She is also using contradicting words: the word “meaningful” is used to describe repetition yet she also uses the word “absurd” which refers to something meaningless. In my work one can think of the mutations that occur from the contrasting materials as being absurd. The *Hive* piece shows elements of this absurdity or tension where the chicken wire and handmade paper were not connecting well together, since the paper was fighting against the dominance of the chicken wire. Even though the piece failed to display all the material flowing together as one, in some areas the *gampi* paper and honey when overlapping gave the *Hive* a sense of balance.

In discovering that there was some balance in the *Hive* piece, I found a different side to contradiction: I found paradox. Paradoxes are different from contradictions in that the opposing
elements may in fact be considered as a whole and not separate. Where contradiction creates
tension, paradox remains just as it is. Coleridge relates the imagination to paradox, describing it as:

This power, first put in action by the will and understanding, and retained under their
irremissive, though gentle and unnoticed, control reveals itself in the balance or reconciliation
of opposite or discordant qualities: of sameness, with difference; of the general, with the
concrete; the idea, with the image; the individual, with the representative; the sense of novelty
and freshness, with old and familiar objects; a more than usual state of emotion, with more
than usual order… (Halmi, Magnuson, and Modiano 495)

Here Coleridge alludes to the idea of paradox as having a balance. He also maintains that
imagination and reality can balance out so that what is imagined makes what is real become new
and fresh. The implication is that only when we can distort something can we look at it in a new
way.

My next sculpture, *Protruding Vessel*, displays the idea of paradox in the materials used. The
piece sits in a corner against a wall and seems to be growing upwards. Inspired by the veins and
tube-like organs that make up our bodies, it is made from repeated curved-like squares that form
tubes. The sculpture moves from thicker dark wire that is twisted chaotically together to more
orderly small wire wrapped with yarn. The yarn changes color from brown to pink as it moves
upward. The brown yarn melds into the thicker metal color on the bottom, making the yarn and
wire appear as one whole material. The brown yarn and darker wire, though contrasting
materials, create a balance, thus becoming a paradox. At the top of the piece smaller tubes made
up of smaller squares protrude out of the bigger tube and are wrapped with yarn of varying pink,
purple, and red colors. This piece alludes to the internal system of the body because the colors
are like those of organs. Though seeming to extend upward, the work can also be seen as an
individual organ-like structure consisting of veins or the outline of tubes. At this point I was
happy to have found a simplicity and understanding between two opposing materials. However, I
missed the contradiction and disconnection of the *Hive* piece. I wanted my work to be more complex and puzzling in some way rather than giving all the answers to the viewer.

In my installation, *Tangled*, though it does portray a paradox of opposites, I added a third material to throw the balance off. The piece consists of wire twisted together and yarn of varying shades of white, and grays wrapped around the wire, making the piece look more organic. The white yarn against the light becomes a warmer tone while the grey yarn remains cool. The wire came from chicken wire but was cut in strips, thus demoliishing the hexagon pattern. A zigzag shape with pointed pieces of wire that stuck out still remained. The installation consists of eleven pieces, some of which hang off the wall while others hang from the ceiling, ending a little above the ground and seeming to defy gravity in some parts where there is only one strand connecting the others. The hanging pieces create shadows on the floor and wall and gently turn. This activates the work and makes it breathe. Contrast is shown in the texture of the two materials: the wire being hard and prickly and being an industrial material with all the strands looking the same, the yarn soft and stringy, varying in thickness depending on how well I had spun the wool. The wire is heavy but the yarn is weightless, so balance between them becomes more obvious. The wire and yarn are both used equally so one doesn’t dominate the other. While these two materials seem like they can’t exist together, they actually can.

However, a third material *kozo*, was added to the installation by dipping some of the white yarn into a vat of water filled with the fiber. The dried fiber adds an element of mystery to the piece because it is so subtle. You can’t see the fiber unless you get very close to the piece, since it formed such a thin layer on the yarn. The *kozo* disrupts the balance between the other two materials, creating a restrained chaos.
With the two pieces, *Tangled* and *Protruding Vessel*, I found that the work was going back to this idea of growth but in a more complex way because an element of paradox was added to it. Tara Donovan, a contemporary artist who inspires me, creates her installations from small units. Her works, though only made up of consumer materials like buttons and plastic cups, mimic nature as a whole. Donovan mentions that in her work: “... I’m completely relying on the physical properties of the material before me, kind of going where it naturally inherently wants me to go, so that things always wind up mimicking nature in a way” (Baume, Mergel, and Weschler 149). Like Eva Hesse, Tara Donovan seems to find ways to manipulate how the materials look without changing their structure. In an approach similar to that of Hesse and Donovan, my work explores this natural process of contrasts. Yet even though I do use the natural texture or flexibility of the material, I also manipulate it to some extent such as disrupting the chicken wire hexagon pattern by cutting the wire, or painting honey on paper to make it appear wet rather than dry.

While the work is made up of repeated systems that form the whole image, there is an emotional charge in some of the works that I feel and want the viewer to feel. The installation *Parasite* is not part of this thesis work yet is still important to note. Consisting of varying sizes of circles starting with very small ones at the center, it is drawn covering the whole corner of a wall. The drawing was done first with graphite pencil and then drawn over with charcoal. Long kozo strands that have been cooked, pulled apart, and torn to create circles are attached to the wall with pins creating a border around the drawing. While the circles create depth by their varying sizes, the kozo brings the work out into the space. The immense size and intense black color of this piece sucks one in and seems to be consuming the whole side of the room. The size also suggests that it could keep growing and eventually take over the entire space.
The installations *Tangled* and *Parasite* were both made through a build-up of smaller parts that multiplied into a huge mass. This process also reflected in chaos theory in what is called the butterfly effect. Theoretically, the flapping of a butterfly’s wings in Hong Kong has the potential to expand to an enormous size creating enough force so that a few years later it results in a thunderstorm in Texas. This shows that small parts when multiplied a massive amount of times creates an overwhelming amount of energy. Likewise, the theory describes how through repeated bifurcation a nonlinear system can either stabilize itself or create total chaos (Briggs and Peat 143). Patterns called fractals are produced from these disrupted systems. It was discovered that no matter how much the system changed, the basic pattern repeated at every scale (Briggs and Peat 91). This tells us that there is a reciprocal relationship between order and chaos. In my work I am trying to find a balance where order can create chaos or where the two states can live simultaneously together. Thus there is a focus on the internal structures of organisms that becomes visible in the immense size they take on.

The final sculpture in this body of work, *Internal Mass* was the first piece that showed dominance of the exterior. It is free standing and is formed out of small volumetric chicken wire pieces that have been attached and covered with plaster cloth. Very thin translucent torn abaca pieces are glued to the plaster. While the abaca covers most of the sculpture, one side shows the sculpture cut out, and inside one sees a maze of twisted wires wrapped around with varying shades of green and yellow yarn. Instead of portraying an internal structure that grows, this work is very contained. The overall form is more of an exterior that holds the internal structure of the yarn and wire. This makes the sculpture different than my previous works because it deals with the exterior of an organism.
However, there is still an element of contrast and ambiguity. The abaca covering this very solid surface of plaster and chicken wire is very thin and flaky. The yarn is soft but sturdy since it is wrapped around wire. Though the yarn is partly hidden by the abaca at the bottom of the sculpture it starts to poke out at the top as if it is struggling to grow out of the space it’s in. Here the exterior becomes the dominant force. The exterior and internal parts seem very separate, as they are made up of completely different materials and do not form the same shape. These two materials create an ambiguity and contradiction in the work, since they are so different, yet are nonetheless attached to one another.

In conclusion, although my work seems to take on a scientific exploration by mimicking natural growth in the build up of small components, as an artist I am doing so in an intuitive manner. This makes the work unpredictable even though this one rule of building appears like a formula. To quote George Eliot from *Mill on the Floss*: “Nature repairs her ravages — repairs them with her sunshine, and with human labor” (521). While nature does always seem to balance itself out nature is also fixed by “human labor.” As humans, we too, need balance in order to make sense of the world. In portraying this balance, I find that order is important, but by being imaginative I can manipulate order into chaos and vise versa, making them exist in one whole form. In *The Breathless Zoo*, Rachael Poliquin, a writer and curator of taxidermies states the importance of the imaginary by saying: “But it is to say that nature is a chaos of forms and colors and shapes and forces, and the various ways in which that chaos has been untangled and made legible should never be taken as nature’s truth but rather as nature’s possibility within a human imaginary” (9). The imagination has become a tool in mimicking but also altering the perception of nature and thereby keeps the same patterns I see everywhere looking new and fresh. The final sculpture in this body of work, *Internal Mass*, is not fully developed and so is something I plan
on exploring further. Now that I have focused on the internal parts that create the exterior, the exterior is something to be manipulated in future works. As I continue to reinvent natural systems, seeing how a whole environment is formed from interweaving systems is something to be considered. Even though much of my work is large, it has not yet been able to hold a whole room.


Images of the Artwork

1. *Drawing Series I*
   - 2013
   - 6 drawings
   - 14 x 11"
   - [handmade paper kozo, pen]

2. *Drawing Series I*
   - 2013
   - 6 drawings
   - 14 x 11"
   - [handmade paper kozo, pen]
   - Detail 1 of 2

3. *Drawing Series I*
   - 2013
   - 6 drawings
   - 14 x 11"
   - [handmade paper kozo, pen]
   - Detail 2 of 2

4. *Drawing Series II*
   - 2013
   - 8 drawings
   - 8 x 10 1/2" and 8 x 11"
   - [handmade paper gampi, pen, pencil, pins]

5. *Drawing Series II*
   - 2013
   - 8 drawings
   - 8 x 10 1/2" 8 x 11"
   - [handmade paper gampi, pen, pencil, pins]
   - Detail 1 of 2

6. *Drawing Series II*
   - 2013
   - 8 drawings
   - 8 x 10 1/2" 8 x 11"
   - [handmade paper gampi, pen, pencil, pins]
   - Detail 2 of 2

7. *Decay versus Gravity*
   - 2012
   - Installation
   - 80 x 48 x 24"
   - [dried cooked kozo stands (paper mulberry)]

8. *Contaminant*
   - 2012
   - Sculpture
   - 13 x 16 1/2 x 14"
   - [metal wire, cooked kozo strands, kozo paper, cranberry sauce, honey]

9. *Contaminant*
   - 2012
   - Sculpture
   - 13 x 16 1/2 x 14"
   - [metal wire, cooked kozo strands, kozo paper, cranberry sauce, honey]
   - Detail 1 of 1
10. *Hive*
   2013 installation 72 × 64 × 17"
   [chicken wire, cotton paper, gampi paper, honey, pencil]

11. *Hive*
   2013 installation 72 × 64 × 17"
   [chicken wire, cotton paper, gampi paper, honey, pencil]
   Detail 1 of 1

12. *Protruding Vessel*
   2013 sculpture 76 × 30 × 25"
   [wire and spun wool]

13. *Protruding Vessel*
   2013 sculpture 76 × 30 × 25"
   [wire and spun wool]
   Detail 1 of 2

14. *Protruding Vessel*
   2013 sculpture 76 × 30 × 25"
   [wire and spun wool]
   Detail 2 of 2

15. *Tangled*
   2013 installation 96 × 72 × 36"
   [chicken wire, spun wool, kozo fiber]

16. *Tangled*
   2013 installation 96 × 72 × 36"
   [chicken wire, spun wool, kozo fiber]
   Detail 1 of 3

17. *Tangled*
   2013 installation 96 × 72 × 36"
   [chicken wire, spun wool, kozo fiber]
   Detail 2 of 3

18. *Tangled*
   2013 installation 96 × 72 × 36"
   [chicken wire, spun wool, kozo fiber]
   Detail 3 of 3

19. *Internal Mass*
   2013 sculpture 32 × 23 × 23"
   [chicken wire, plaster cloth, abaca paper, spun wool, wire]
20. *Internal Mass*
   2013  sculpture  32 $\times$ 23 $\times$ 23"
   [chicken wire, plaster cloth, abaca paper, spun wool, wire]
   Detail 1 of 2

21. *Internal Mass*
   2013  sculpture  32 $\times$ 23 $\times$ 23"
   [chicken wire, plaster cloth, abaca paper, spun wool, wire]
   Detail 2 of 2
APPENDIX

1. *Parasite*
   2013 Installation  112 × 168 × 72"
   [graphite, charcoal, cooked kozo strands, black ink]
   Work-in-Progress 1 of 2

2. *Parasite*
   2013 Installation  112 × 168 × 72"
   [graphite, charcoal, cooked kozo strands, black ink]
   Work-in-Progress 2 of 2

3. *Parasite*
   2013 Installation  112 × 168 × 72"
   [graphite, charcoal, cooked kozo strands, black ink]

4. *Parasite*
   2013 Installation  112 × 168 × 72"
   [graphite, charcoal, cooked kozo strands, black ink]
   Detail 1 of 3

5. *Parasite*
   2013 Installation  112 × 168 × 72"
   [graphite, charcoal, cooked kozo strands, black ink]
   Detail 2 of 3

6. *Parasite*
   2013 Installation  112 × 168 × 72"
   [graphite, charcoal, cooked kozo strands, black ink]
   Detail 3 of 3