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# Adaptive Technomythography: The Apotheosis Of Machine And Development Of Legend In A System Of Dynamic Technology

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# ADAPTIVE TECHNOMYTHOGRAPHY: THE APOTHEOSIS OF MACHINE AND DEVELOPMENT OF LEGEND IN A SYSTEM OF DYNAMIC TECHNOLOGY

by

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B.A. Rollins College, 1997

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Fine Arts
in the Department of Art
in the College of Arts and Humanities
at the University of Central Florida
Orlando, Florida

Spring Term
2007

# ABSTRACT

Human beings will effectively deify any suitably complex system that cannot be explained through basic haptic interaction.

Our culture loves technology.  These days it seems we need it to feel whole.  In an effort to explore the development of mythology and modular aesthetic in a technological age I have designed and constructed a number of interactive robotic 'organisms' to engage in arbitrary movement in geometric enclosures. Through observation and dialog I seek to assess the extent to which people assign human characteristics to the random and oft times aberrant mechanical behavior.  To supplement this endeavor, a fictional astrological system that proposes logical (albeit mythological) explanations for the peculiarities in these relationships has been created.

# TABLE OF CONTENTS

# LIST OF FIGURES

# INTRODUCTION

What is essential in the words that follow, their very core and purpose, is not the academic documentation of process or ideas, mechanics, materials, or philosophy, it is the narrative cataloging of a very odd journey.  It is the story of a story.  For all the high-mindedness of the preceding abstract, let's get down to what this work, this art is really about: making up believable fictions for the things we do not understand.  The preceding Abstract is a Lie, or perhaps more appropriately, a hyperbole.  It functions as bait, set out to capture the thoughts of the academically entrenched.  It serves to draw them into a course of study and corresponding body of work that operates outside the standard model of hypothesis-testing-defense-conclusion.  The "research" after all, is made up.  I made it up.  While the proceeding thesis will endeavor to document the path of the research, which has, in part, resulted in the aforementioned body of work, depicted throughout…in the end, it is the story that matters.

Every piece has its role in this story.  They are like characters in a play, each appearing on stage in time, each serving a purpose in the scene as it progresses; some grow and develop into dynamic heroes, some will be killed off to move the greater plot forward, and each of them have a story of their own.  Within this chronicle, as the work develops and the story proceeds, I will do my best to answer these fundamental questions about each piece: What is it?  What is it made of?  What was its purpose to be?  I hope by addressing these three questions for each of the things I have made, to reverse engineer a sense of how it all came together and in doing so tell the story of this work.

Now, as for my role, that's another story altogether. As I am also a component piece of this whole, perhaps it would be worthwhile to breakdown my part in all this by answering the same fundamental questions I postulated in the preceding paragraph, for these are the questions at the outset of each character's tale. : Who am I? Where did I come from? What was I made for? I am Roger Matthew Wolf. Marked as such from birth, I suppose, like all organisms, I represent a fairly complex biological system. I'll leave the descriptions of how and why the human machine does what it does to better scientists than I and in stead offer a brief account of some of my exploits to help illustrate some the characteristics that define the perceivable me: I earned my bachelor's degree in Psychology, a pursuit fueled by my interest in learning about the dynamics of human behavior and how and individual responds and interacted with their environment. I also wanted to see how the world interacted with people and so after college, I sought out to see the world. I have had the opportunity to traverse the globe; to see the wonders of unique cultures across 4 continents. Travel has helped to shape my inherent curiosity into a more mature explorative spirit. My drive to learn and experience has lead me to explore a number of career paths. I have been a graphic designer, a chef, a teacher, and a web developer to name a few. When considering these adventures as they relate to who I am, I found there to be some common denominators that expressed key traits of my personality: A desire to learn, a will to create, and a dream to inspire.

I love to create. It is just what I do. It likely began with drawing. As a child (and still today) I would draw on anything I could get my hands on with whatever tool I could find. Marking the world felt as natural to me as breathing or eating and was perhaps the

most vibrant way in which I related with the world as I was growing up.  It was a quiet

kind of power, an amazing way for my imagination to manifest and only the beginning.

I learned that with my imagination and some of the most basic tools, I had the ability to

modify the world.  Suddenly, every crayon mark on the wall, every calculated fold to a

piece of paper, the strumming on a guitar, the tapping of pulsing rhythm on a tabletop

resonated with the power of variation.  Every change made the world more interesting to

me, and it seemed to affect others as well.  When the modifications were viewed as

positive and pleasing, I was rewarded, when I made a mess, I was scolded.  There is

something profound that is communicated in the changes we make to the world around

us and it can have a remarkable effect on the people and systems that surround us.  This

communication, this striving to give external representation to the unique inner voice in

each of us, to connect ourselves to the epic whole of the world we live in, is at the very

genesis of great arts.  I wanted to learn more about how this interaction works and

broaden the scope of the artist--art--observer relationship; at least that is how all this

started.

# PHILOSOPHY

It is important to note before proceeding with any discussion of methodology, that this creative process stems from a rather simple philosophy:  All things are constructed of some very basic, essential component parts.  Well over 2000 years ago the Chinese warrior-philosopher Sun-Tzu noted: "there are only five notes in the musical scale, but their variations are so many that they cannot all be heard.  There are only 5 basic colors but their variations are so many that they cannot all be see...there are only 2 kinds of charge in battle, the unorthodox surprise attack and the orthodox direct attack, but variations of the unorthodox and the orthodox are endless. The unorthodox and the orthodox give rise to each other, like a beginingless circle – who could exhaust them? (34)". Essentially, there are few component elements with which to develop any project.  If art is to remain vibrant and grow the artist must embrace the fundamental limitations and foster an adaptive dynamic approach to the creative process.  It was true 2000 years ago and it is true today: Variation is the key:  Art that can integrate technological advances to change and adapt to the environment...to the individual observer...to time and proximity, that is the focused intent of my research.  It begins with the perceived desire of all truly living things:  To adapt...to evolve.

Sun-Tzu suggested that a superior force could be attained by understanding the fundamentals in an environment and utilizing dynamic variations on these elementary concepts to create wholly unique combinations(Sun Tzu 34).   It is true when developing a strategy for waging of war and equally invaluable in the process of making of art.

# DEVELOPMENTAL CHALLENGES

Long before any robots were born, characters conceived, or fables constructed, I had this dream of making real art. It seemed the thing to do, being that I was participating in an MFA program. The problem being, though I had something of a philosophy and certainly a history of being created, I didn't really have a medium or methodology for making contemporary art. In truth, I had very little concept of what was happening in the international dialog of contemporary art, but I'm a clever guy, and I read really fast.

While I endeavored to catch up on the last 100 years or so of the history fine art, I also needed to be creating some kind of work to meet the production expectations of the courses I was enrolled in. The preliminary experiments were conducted in a fairly scientific method. During the first semester I had chosen to take digital photography to meet an elective requirement. Producing work for this class presented an interesting challenge, mostly because I did not have a proper camera. Lack of knowledge, tools, skills, and production model were no excuse not to be making things though. It was only school after all, and whether it's a mathematical equation, or a research paper, there's a formula for solving just about any sort of problem. I just needed to figure it out.

Step one was the aforementioned research, looking at and reading about art. It was still very early in the semester and my research focused on artists I had some familiarity with. It had little to do with what I liked about art and was focused on a preconceived notion of what was defined as a work of fine art. I would spend my

evenings in a bookstore reading the available books in the Art section.  Dali, Picasso,

Ansel Adams, and DaVinci, I read what I could and tried to find the common elements

in their works, the thing that made it all ART.  At this point, meaning was a non-issue

for me.  I was not concerned with concept.  Ideas have never presented a problem for

me, what I was looking for was a way to identify the component parts that made the

work I was looking at ART.  Using my cell phone, I took pictures of some of the work in

the books so that I would have a visual reference to go with my notes, and that is when it

occurred to me that my awkward efforts to educate myself on fine art might also serve

me in my need to produce projects to meet assignment requirements for the Digital

Photography class.

It's a dumb idea, I'll admit, taking low-resolution pictures of famous works of art, and I had not yet discovered post-modernism, appropriation, or artistic deconstruction, to inform me of the history of something like this in the modern art world.  So, I uploaded the images to my computer for two purposes.  The first was to carefully breakdown the component parts that aesthetically made these things art, and the second was to find some way to convert the images into something useful to turn in as class projects.



Figure 1: A Component Breakdown Experiment of an Ansel Adams Photo

In an attempt to serve both purposes, I opened the images in Photoshop, played with the levels, color, brightness and contrast and tried to reduce the works to basic composition, color, and shape to see if they still retained their artistic value even in this modified state.  These first experiments were rather poorly received, they had no real magic in them, but in the process of printing and presenting the images I learned something of value: while the images themselves didn't inspire much feeling in people, they were interested when I described how I made them and what I was exploring.  I

learned that I was much more successful at selling people on the idea than I was at producing good work, especially if I had an opportunity to dynamically engage viewers in an active dialog about the work.

So, let's if I can answer those fundamental questions regarding these first experiments. What is it? It is a series of images composed of blobs of color and shade. What is it made of? It is low-resolution digital photographs taken with a cell phone camera, manipulated in Photoshop and reprinted on paper. What was its purpose to be? They were experiments to explore the structural components that make up (what I understood at the time as) fine art. I had hoped to find some clues as to how I should proceed in my efforts to make worthwhile art projects. If I could determine the elements that were similar in each of the works on a very basic level, I might find the key elements that I would need to have in my work to move it forward. The purpose that this project serves in the greater story is relatively minor, but important all the same. Through these experiments I learned that there is not a lot of difference between a broken down art image and the basic components of a graphic design project. These earliest experiences also illustrated the value of interacting with the audience. If you can begin a conversation about the work, no matter how far fetched the dialog may be, there exists a unique opportunity to have them convince themselves that there is something worth considering in the work.

A note of two things before moving forward: Its probably important to mention that I engaged in a very active effort to NOT use my existing drawing talent or my skills as multimedia/graphic designer to make art projects. Even in the utilization of Photoshop to make the digital photos into abstractions I thought I had breached the

boundaries between fine art creation and graphic design production.  In my mind, it was cheating, and while I valued them highly as peripheral skills for an artist to have, I did not perceive them as fitting into the model of fine artistry that was my initial goal in the program.  For those who are reading this and are unfamiliar with the final body of work I created in this program it may be worth reading ahead to the XODIAK 12 chapter at this point.  You'll get the joke of this better and see the irony in the preceding statement.  Also, in retrospect, most of what I was doing for the first half of the first semester of grad school was running myself through a condensed version of what most people get in an undergraduate art program; Experiments with color and shape, etc.  These things were probably necessary for me to progress and while they may seem obvious to someone approaching this thesis from an art background, all of it was new to me.

The next set of experiments were, once again, executed as an experiment in art construction and were probably only stimulating to me and no one else.  As such, I will move quickly to answer the fundamental questions about the work.  I referred to them as analog bitmaps, a grid of color blocks with areas negative space determined by numerical sequences.  They were made up of square paint swatches acquired from a local hardware store placed on the wall.  It would take quite awhile to place the 60-120 paint swatches on the wall and while I found the process of constructing the work to be calming and enjoyed the contemplative moments afford me in the repetition the end result was, once again, rather bland.  If I remember correctly, I promoted the work as a commentary on the monotony of job of the modern digital graphic designer in a corporate environment, calculated and precise, but very disposable.  At least that is what I made up to explain it.  In so far as the purpose of this work in the overall story, I

believe it comes down to this: I really like to place pieces in a puzzle and I like to play

with colored blocks.



Figure 2: A Broken Numerical Sequence Represented in Paint Swatches from a Hardware Store

Figure 3: RemnAnt : An Interactive Kinetic Creature Triggered When you Close the Cage on It

I believe the first real break-through occurred during the mid-term critiques of this first semester of graduate school.  I had kept productive, continued to experiment, but nothing really had emerged from it.  As noted in the introduction and in this first section of the thesis body: I draw.  I sketch…and I have always been rather clever in what I produce with pens and pencils and paper.  It has also been noted above, that I had something of an aversion to the idea of using that to make fine art.  Still, I liked to jot down conceptual ideas and draw versions of the projects in my sketchbook and by mid way through the first semester I had a lot of loose ideas.

The first couple of experiments were received rather poorly, in my opinion, and while they were interesting for me to produce, they did little to truly capture the viewer's

imagination.  As a web designer, I knew that adding the right amount of interactivity to a project could significantly increase a users satisfaction in the overall experience.  The struggle then became how to experiment with interactivity without having to turn to my existing skill sets as a multimedia designer.  I had number of conceptual sketches of robotic stylized creatures that I had drawn in my sketchbook and thought that bringing them to life (in the form of kinetic sculptures) might be a compelling challenge.  It might also offer me an opportunity to incorporate some variety of interactivity into the work.  There was one problem in developing this idea:  I did not have any experience in sculpture or animatronics, no real method of producing these concepts as real objects.

The idea of component parts and deconstruction had been prevalent in my first experiments.  That process of building things from the leftover parts of my deconstructive explorations is a key part of this story and essential to the production of most of my art projects over the next year and a half.  For now what is important at this stage is describing the pieces, their influence on the rest of my work should be apparent in the answers to the fundamental questions about their origins and will be readily recognizable as the story progresses.

The two pieces that make up the InsectIcon Series are Interactive Mechanical Creatures made from parts from old computers and toys.  The parts and pieces were rather awkwardly stuck together to form a basic insectoid shaped body around a series of motors and gears that would activate in response to viewer interaction (sound or touch).  Their purpose, the goal in making them, was really to see if I could.  I had some general sense in the creation of the initial concept that they had something to do with contemporary society and our tendency to act as like-minded drones in a corporate

system, only occasionally brought to life in response to a deeply ingrained need for human contact.  Of course, I may just be making that up in an effort to come up with a reason why I made them.



Figure 4: DiSection : The Second Interactive Creature. Designed to Arch and Bend in Response to Sound

There was another break-through, not directly in this work, but certainly related to it: Spin is king.  Seriously, I'm fairly certain I made up the meaning for both of the pieces right there on the spot.  It seemed at the time that my strongest "art" was in the con.  A P. T Barnum showmanship that gave viewers an opportunity to imagine what something could be.  I found that I could make just about any piece of junk into something interesting if I could invent a back-story to describe why it was put together.

There is a certain magic hidden in everything and we have a susceptibility to believe just about any plausible explanation, especially if its related to us in the form of a story. This would be very influential to the development of my work later on in the program.

Though I had excelled in the critiques of the work and the general response to the creatures was quite positive I felt a distinct disappointment. My understanding of the international art world was be broadened daily through participation in the MFA classes and lengthy conversations with my peers and faculty advisor. There seemed to be a great deal of effort being made in our little MFA community (at the time there were only 9 students and about the same number of faculty involved in the program) to find a place and connection for each of our art work in the gallery art system. It was during this time that two focal requirements were implied as requisite for each of us in the development of our art. One: That it have a defined conceptual basis and two: that the art be produced consistently and in great quantity. I really didn't have a solution to accomplish either.
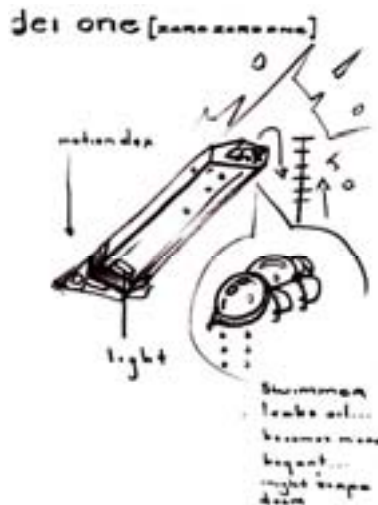


Figure 5: A Proposal for a Skimmer Bug that Would Become More Boyant Over Time and Potentially Float to the Top of its Container, Escaping, but Breaking Itself on the Floor in the Process

There was no lack of conceptual ideas in my head (or sketched out on paper for that matter) but they had regrettably little focus and my lack of skills as an artist would have made the production of most of these concepts all but impossible. With the approaching semester deadlines starting to loom, I needed to figure out what I was going to do next, and fast. I had experienced a measure of success with the interactive mechanical creatures and had sketched out a number of ideas for more of them, but they were not the only thing I was working on at the time and I was fairly certain that I did not want my first half way decent work to become the only thing I did throughout the program. I had been exposed to a few current artists whose work suggested that there might be a place for clever robots in the gallery art world, especially the imaginative machines Kenji Yanobe (which would become tremendously influential to my work later on) but there was still the problem of the lengthy research, development, and production time, and I really didn't have a solid conceptual reason worked out for why I was making them.

So there remained a real lingering question in the weeks that followed the first critiques: What I was going to do next? Learning about the work of artists like Tom Friedman, Damien Hirst, and Keith Haring gave me a glimpse into a different kind of art world than I had previously been exposed to, one that was not at all like the museums I had been to in the past. A lot of the work was clever and gimmicky and lacked the prestige and finish that I expected of fine art, but it was cool, and accepted in the contemporary art world so long as you could make a lot of the work and you could do it consistently with style. In an if-you-can't-beat-them-join-them type moment I all

but abandoned the idea of making anything really worthwhile.  No more dreams of creating capital "A" art for me.

I had been toying with the idea that there was a kind of interplay happening between people in the world and the things that we create.  In both the writing and the art world there existed an idea of automatism, as sense that if you just set things going, the art would shape itself based on your subconscious drives.  I also had a notion from having produced the earlier mechanical creatures, that exploring the interactions between man and machine held some interest to both me as a creator and the audiences viewing contemporary work.  Having been recently introduced to critically accepted art pieces like Hirst's giant spirograph art, I also had a sense that, if it was clever enough in execution, one could devise a repeatable system and process for easily creating a substantial amount of works (I'm not saying that its good, just that it is easy to make a lot of it, and that would meet the necessary production requirements of the program).  I took these notions and sketched out an idea for a machine that could transmit a creative idea and transform a mechanical process into a finished work of art.  The idea was, that by sending the sound waves of recognizable song through a solid object and then pouring colored liquids onto said object, that the combination of the sonic vibrations reverberating through the object and the effect of the music on the person pouring the object, would produce an abstract rendering of the total synthesized experience, representing the sum of the combination of recorded creative expression, mechanical amplification, and human sensory responses...and the audience might dig it, too. I decided to call it: The Chromaesthesia Device.

Figure 6: The Chromaesthesia Device and Me

What is it?  That is both very easy and very difficult to answer.  The device is a series of speakers (powered by home theater stereo receiver) connected to a plexiglass plate illuminated from below and various fluid substances, but that doesn't really describe what it is from an art perspective, this sort of thing is going to get me into trouble throughout the MFA program.  The device was built as a mechanism for producing large quantities of art; you put in a CD, you turn it on, you pour liquids on the plate and you've got another work of art.  The question arose:  What is the art?  Is it the device (not really), is it the process of dumping liquids on the plexi, is it the "painted" plate that is the result of the whole thing?  The device was built rather badly, cobbled together, and it was fortunate that it operated at all.  The results of the process were, once again, fairly uninspiring.  The thing that really worked about this project, the thing that seemed to capture people's imagination, was the unveiling of the idea and my formal presentation of the device that served as the lead-in to the actual process of using the device (I am consciously avoiding the term "performance" specifically because though, at the time, I did not know what a performance artist was, I certainly knew I did not want to be one).  One significant problem that I have neglected to mention in all of this, is that, quite honestly, the device really didn't work.  It would have required an ear shattering volume and a far more sonically conductive surface to really move the liquids around.  In the end, there was some success in the execution, in the using of the device, but its value overall owes more to its intrepid concept, probably and the idea that someone would come up with it and the attempt to make it work at all.  That was probably what was compelling to the audience, and once again, the "spin" factor probably helped it, too.  Its purpose in the grand scheme: People like a good show.

Figure 7: The Results of the Activated Device, Jimi Hendrix's Purple Haze, Some Motor Oil, Cough Syrup, Vodka, Detergent, and Me.
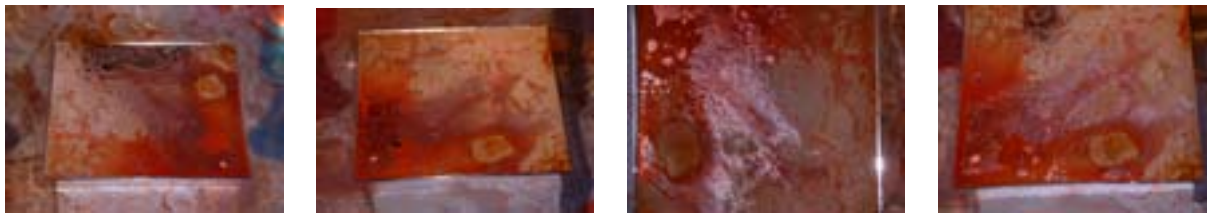
Figure 8: An Un-produced Concept Using Ribbons that were to be Coated in a Colored, Flammable Substance Strung-up in Patterns Around Nails in a Concrete Wall to be Lit and Filmed as it Burned

As the second semester began I found myself faced with a strange dilemma: Do I continue to develop an idea (and device) that was gimmicky, at best, and functionally doomed, at worst, or, do I go back to the drawing boards and summon up another off-the-wall idea to pursue? A lot of questions were being raised regarding how our art projects were going to coalesce into a unified body of serial work. My projects thus far included: Some abstract prints created from digitally manipulated photos, the paint swatches which formed makeshift bitmaps, two poorly built interactive robot bugs made from toy and computer detritus, a failed apparatus for translating music to art, a growing chip on my shoulder formed of my sense that the contemporary art world was full of charlatans, fools, and perverts, and a sketchbook full of ideas that would place me squarely in their good company. I was about ready to burn it all and just make web sites.

I put aside the Chromaesthesia Device and tinkered with a number of other ideas (most of which were logistically impossible, conceptually indescribable, or just plain dangerous). I continued to take things apart, both mechanically and artistically, but there was almost no focus and even less joy in the process. It was under this general cloud of malaise that I began working on The Joystick. An interactive multimedia project that incorporated a solid pink USB joystick that users were encouraged to manipulate. The joystick was hooked-up to a computer which tracked its movement and over time, the more you moved it, would convert abstract images on the computer's monitor into images of people masturbating (no, I'm not joking, I actually designed and built this). Nobody got it, I didn't like it, and worse, it was another one-off, there was no way for me to build a body of serial work based on the piece. With that effectively out of my system it was back to the old drawing board.



Figure 9: A Random Idea for a Machine/Creature that Would Draw Patterns.

# THE CORTEX EXPERIMENT
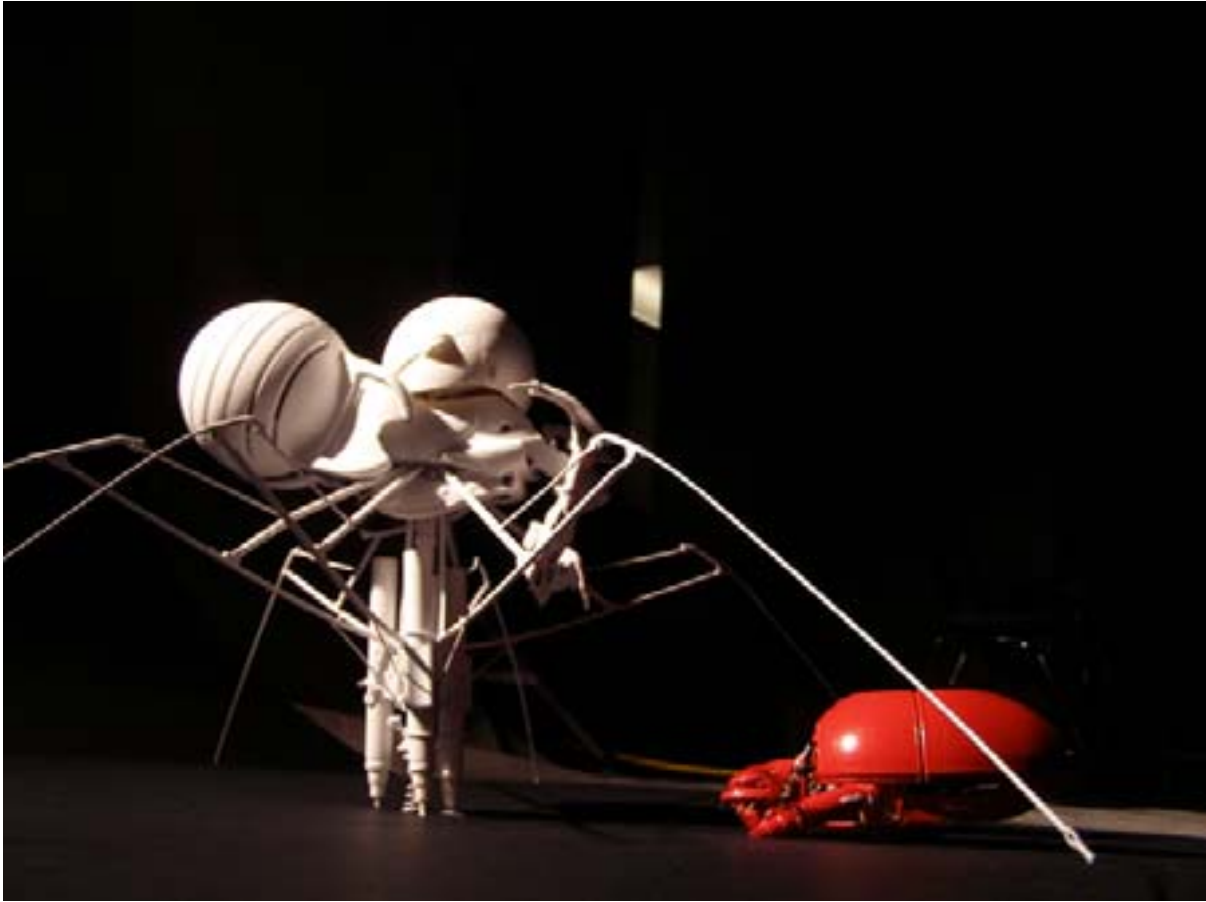


Figure 10: A Showdown Between AutoMechimaera: White and Automech: Red

It is now about half way through the second semester and while my little joystick detour was not entirely devoid of learning value (I did finally give into using the computer as a tool for creativity, plus there was something successful in its integration of human action and adaptive technological responses being used together to make the project work), it still felt like a failure.  I needed an integrated new direction for my work.  It was going to have to be something that could build on what I had done and learned in the recent past.  I would also need to be intellectually and creatively

stimulating to me. It needed to be variable and mutable enough that it could grow and sustain itself in time and I wanted it to really capture people's imagination, as well.
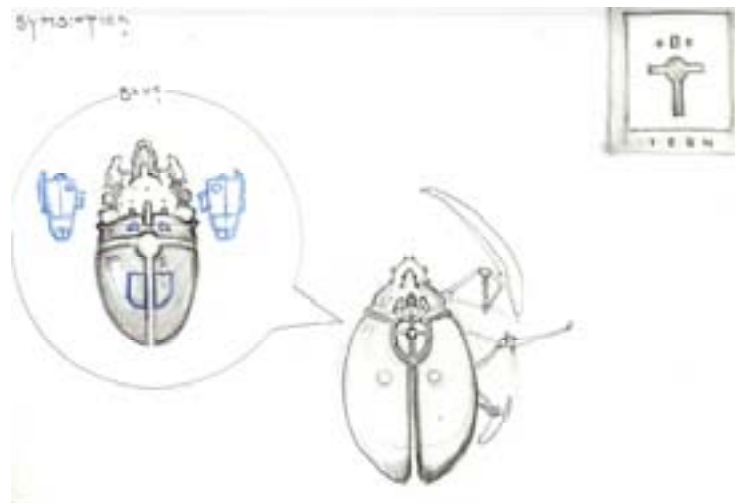




Figure 11: Design Sketches for the Automech

What resulted over the next 9 months or so was intended to be a dynamic art making system as well as something of a loosely defined hypothesis on the mechanics of the creative process. Inspired a little by Calder's Circus, Tim Hawkinson, and Sesame Street, the Cortex Experiment is comprised of a series of solidly colored, insect inspired autonomous interactive machines (Automechs) that move around in a confined

environment leaving trails to mark the paths they have taken as they run into each other and the walls of their enclosures. They are made of parts and pieces from toys and other plastic household items and each one is equipped with paint pens to produce the markings that they leave in the wake of their kinetic motion. The purpose: Originally, I was still searching for a solution to the problem of how to produce a lot of art and I jokingly thought: what if I could make my earlier robotic experiments make my art for me and as I considered it further, I wondered: what if a lot of those creatures could work together...



Figure 12: Pre-production Sketches of MechArachnid and Hexagonal Web Enclosure

The Cortex Experiment was developed from the conceptual idea to demonstrate that imagination and artistic expression are the result of a complex bio-mechanical process. Dynamic Systems, like human creativity and computer processing, are comprised of a myriad of variables working simultaneously, oft times unawares of the part they play in the larger scheme or there own connectedness and interdependency to other related systems. The end result of these combined factors is usually viewed as a complete and unified structure. This became the unifying intellectual theme of all of my work that has followed. I had reflected and found that all of my previous work had some element that sought to illustrate the component nature of complex systems. They had some element that demonstrated how a number of small mechanisms operating under defined parameters could be used to represent a significant and unified idea. In the preceding semesters, I found myself directed toward explorations of human beings' relationships with technology; and how this affected social behavior and imagination, but not a lot of artwork had actually been particularly successful in reflecting those notions. It was there in the work though, through pieces like The Joystick, The Chromaesthesia Device, and The InsectIcons, the concept had found manifestation in the utilization of technology (or the appearance thereof) to create an interactive experience that I had hoped would impact viewers on a visceral, as well as intellectual, level. So I had a central theme: Creative Technology.
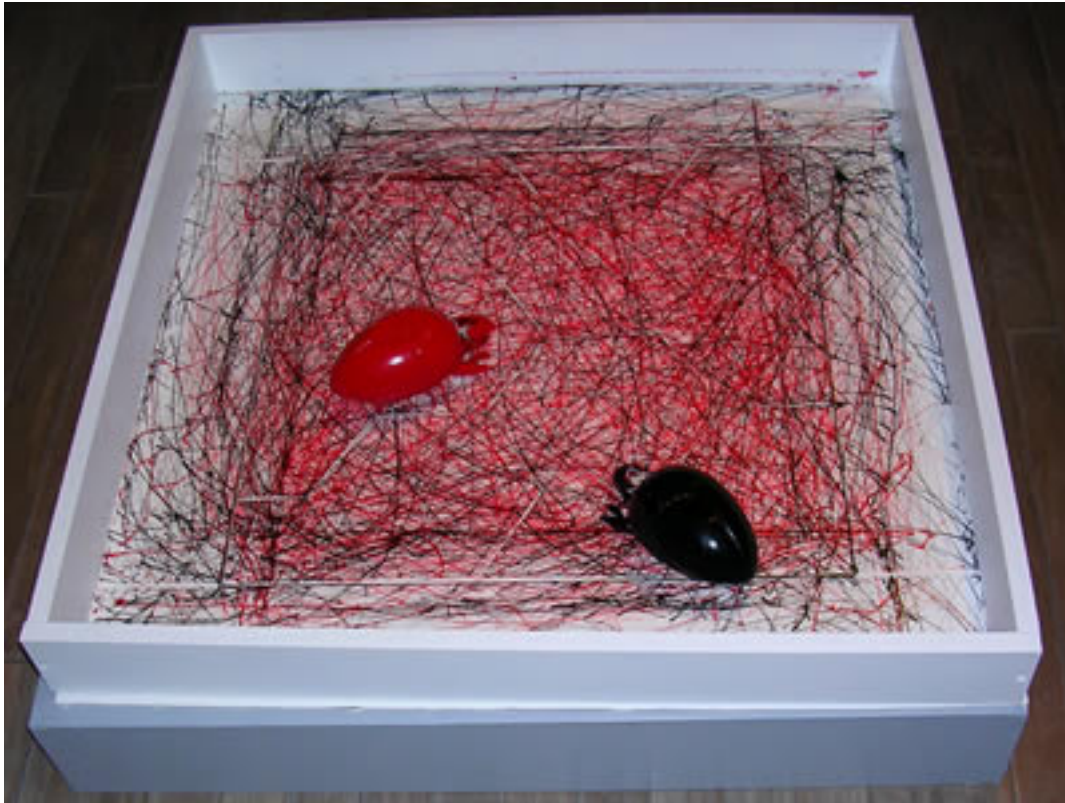
Figure 13: Automech Installation (first public showing of the Cortex Experiment)

The most significant problem with the concept of creative technology was that: while people seemed interested enough in an experiential involvement with the works on a visceral level...no one cared about exploring some esoteric theory about interconnectedness and the gestalt of complex structures.  It was all too much and still is.  It was an important realization when I recognized that I had fallen prey to what I believe to be a classic artist folly:  I had shaped my work around a perspective that I understood almost instinctually and thought that others would be able to see the same things that I saw in the work if I made it suitably visually stimulating. While there is likely some real valuable research that could be done on the subject, visual art is probably not the most effective means of communicating it.
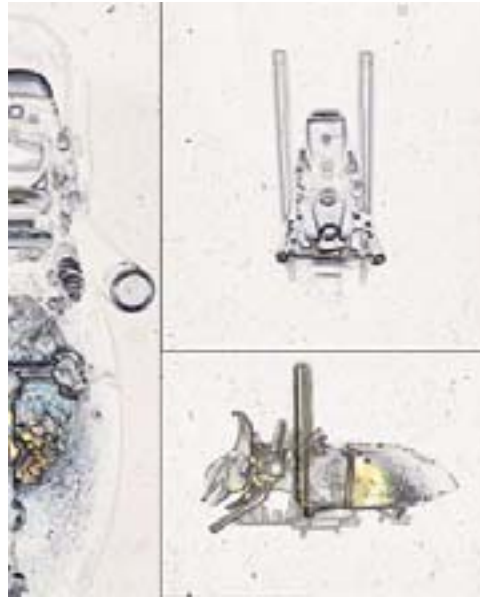
Figure 14: Schematic Scan of Prototype Automech: Gold

The concept and work would desperately need to evolve in a couple of essential ways if it was going to survive.  Specifically, it would require a focusing, a limiting of scope of the ideas.  It would need to be about something specific, something that connected directly to what was happening in people's lives. I would have to find a more feasible approach to establish a meaningful communication with a wider audience, because somewhere, deep down, I had never truly abandoned the quest to find the elusive fundamental elements of an art experience.  I still wanted to try to build a substantial connection between the ideas, materials, aesthetic product and viewer's emotional response.  To make something legendary that people would feel compelled to talk about (and care about) after they had seen it.

The other challenge that hindered this project's future was that, like many of my projects in the earlier semesters, every piece required a lengthy research and development phase.  It took far too long to design, build, and maintain the creatures and

I was growing tired of trying.  Despite having the central theme of mechanisms

operating in dynamic systems and a burgeoning artistic style to tie my work together

these were dark and disappointing times.  In the struggle to make something great, I

missed out on a very important piece of the art experience, the sheer joy of imagination.



Figure 15: Cortex Experiment Interactive Artist Statement

There was another realization rapidly creeping in:  Despite my having developed

a real understanding of the systems that governed the contemporary art world, I could

not shake the sense that the work I was producing remained uninformed and only

peripherally associated with anything historically categorized as "fine art".  There was

still a lingering notion that I should be creating something of the capital "A" Art variety

(even though I had abandoned the attempt at it and publicly scoffed at the

categorization of any of my work as art).  I held on to a fiction that there was a secret to making great work, the stuff of legend with a capacity to shape peoples lives forever; A way to produce things of remarkable power with the capability to illuminate thoughts and give form to deepest ideas.  The research seemed to indicate that it had been accomplished before in the past and I pushed myself harder to develop ideas that would touch individual's lives.  While I continued to strive to find something epic, I also worked to maintain academic productivity and make things that demonstrated my existing serial content and role as the guy who makes those robot bugs.

Despite all of the problems listed above, I continued to try to build on this project for some time.  Well into the second semester of the second year of the MFA program, I was still cranking away at designing and constructing characters and environments for the Cortex Experiment.   It was work and I approached it as a job to be done.  Fortunately for me, some excellent advice was just around the corner.
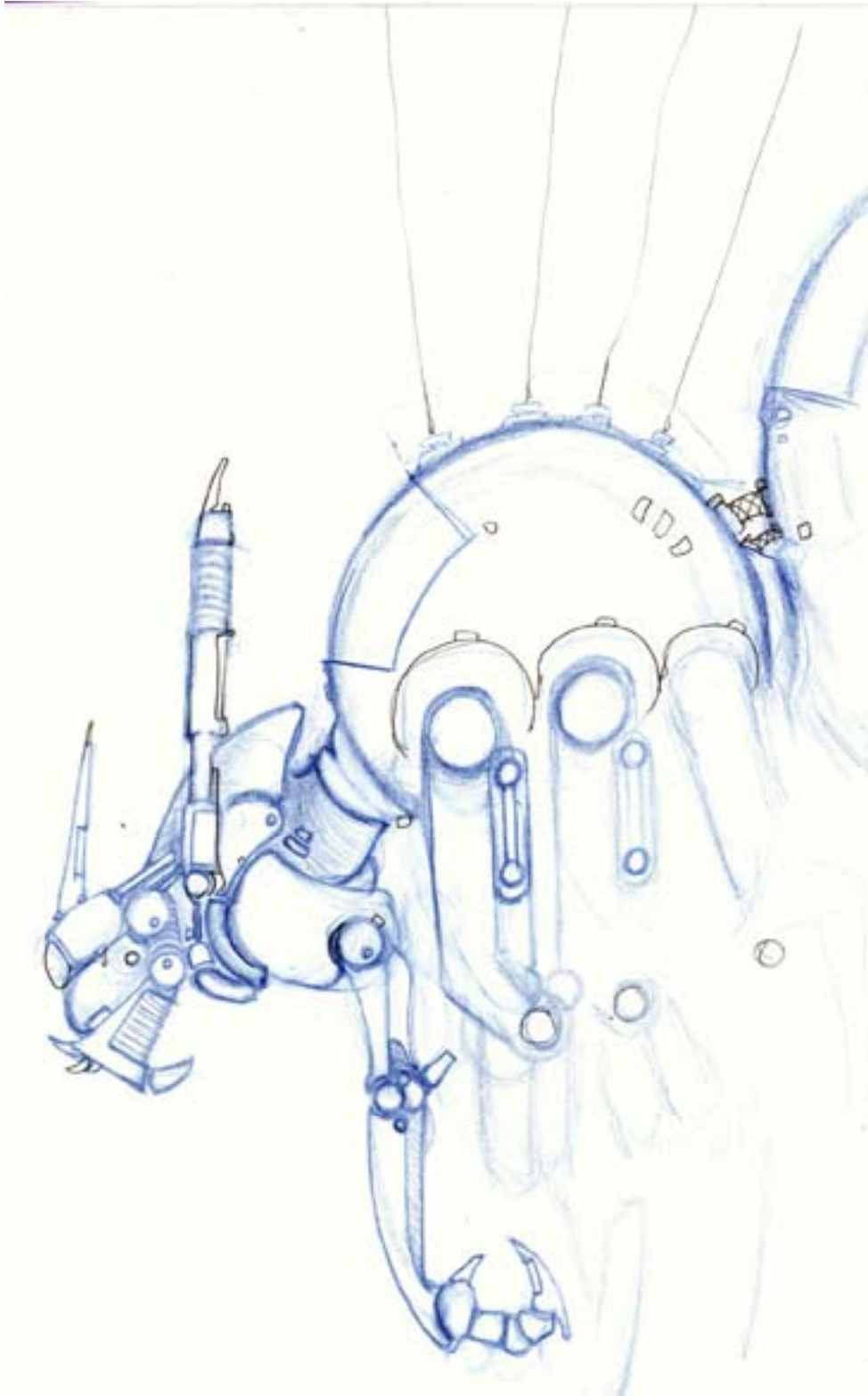
Figure 16: A Conceptual Design Sketch for an Interactive Arachnid Cortex Mech
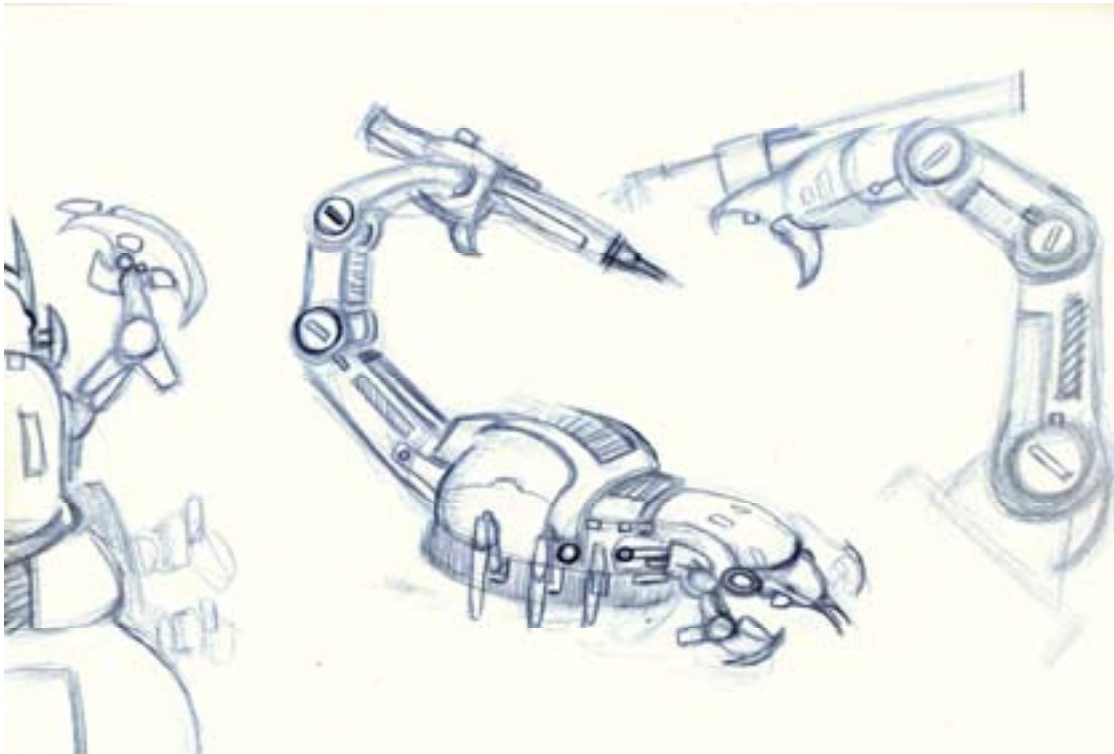
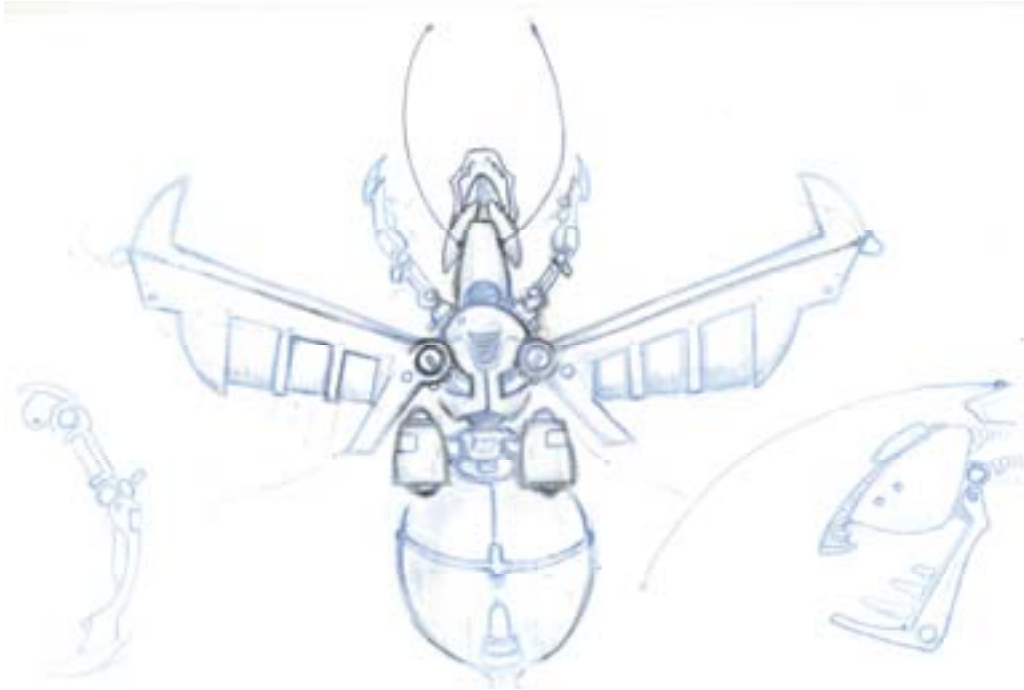Figure 17: An Unfinished Design for a Hostile Striker-mech



Figure 18: An Unproduced Cortex Design for a Hive Queen Mech

# IN BETWIXT

So the work continued, and it was mostly just that, work. By midway through the second semester of the second year in the program I had built 4 automechs, 2 large geometric enclosures, 5 or 6 half finished machines in the works, and a slew of sketches for new creatures on paper. The development was slow going and the only elements that I enjoyed at all were the pre-production drawings and the deconstruction of toys and household appliances to get components for building these monstrosities. There had been some advice from my advisor directing me to find a way utilize what I still enjoyed about the creative process to redirect/refocus my work. It was obvious that my lack of enthusiasm was affecting my productivity. Out of those discussion came the realization that what I really liked about designing the projects was the process of inventing characters and that in my mind I had been (at a very basic level) establishing personalities for the machines and I then sought a way to make my work about these basic character types and the stories that define why they do what they do.

Mythology has always been of great interest to me. When considering how I was going to make my work about the characters I had been developing, I found myself connecting the ideas I was trying to represent in my previous work to archetypical creation stories and the fables and legends I had read growing up. These included Aesops' fables, and Greek/Roman and far eastern mythology, biblical stories, and American folklore, as well as comic books and children's illustrated books, Star Wars, and cartoons. Originally I had planned to bring these ideas together in a format similar to the cortex experiment; by creating interactive robots to play out these deeply ingrained legends in a highly stylized and technologically symbolic fashion. Ultimately,

these robotic scenes, these myths reconfigured for a technological age, were to provide an evolutionary track for me to find avenues of creative development that could keep me interested by allowing me to connect to some of my favorite inspirational works. While none of these ideas ever came together into a finished mechanical work the process of thinking through them and about them allowed me to move into the final phase of my MFA research. In the process of drawing out these concepts I effectively produced a large body of interesting images. Feeling that just present these images as small works on paper was not an effective way to substantiate the ideas I decided to scan them in, touch them up in Photoshop and print them in a poster sized format. In the chronology of the MFA experience, this would be right at the end of the second year.
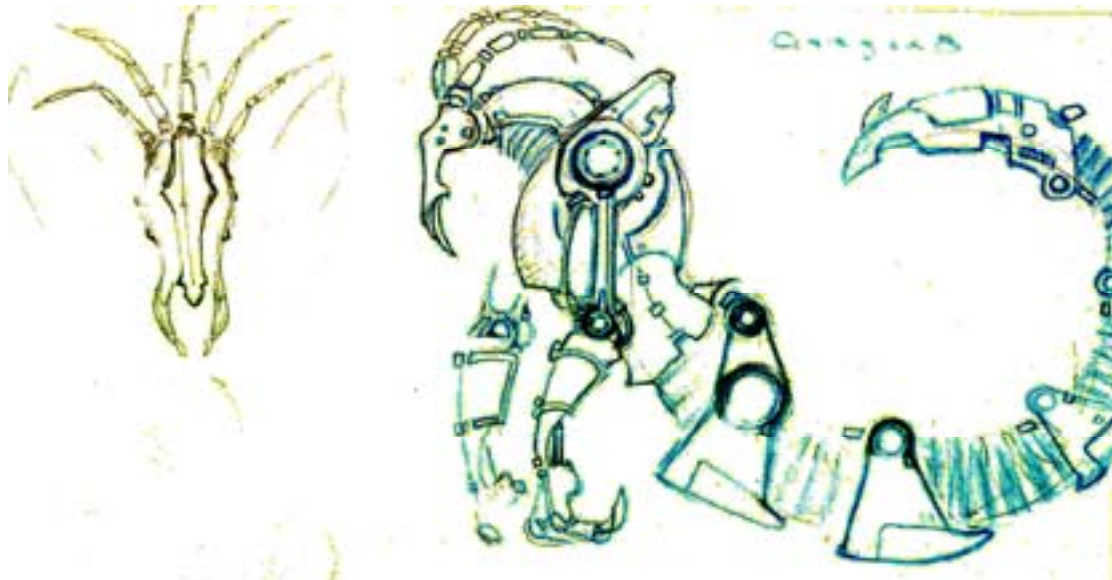
Figure 19: Preproduction Sketches for Developing Machine'sMyths : A Series of Classic Legends to be Enacted by Interactive robots | Gorgon Above
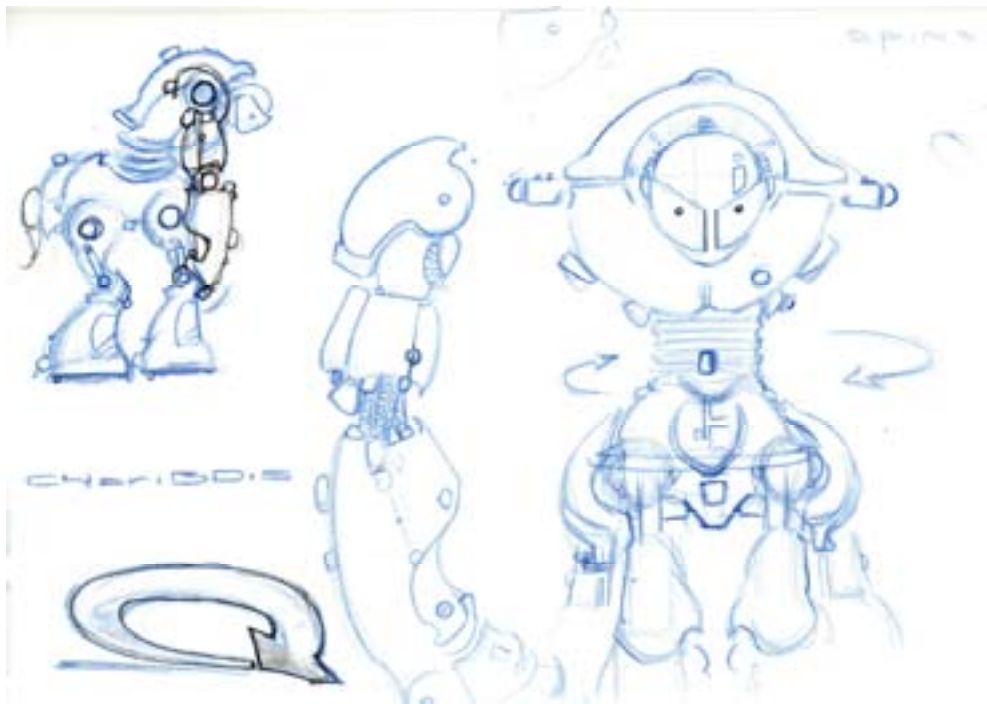
Figure 20: Machine'sMyth | Charibdis
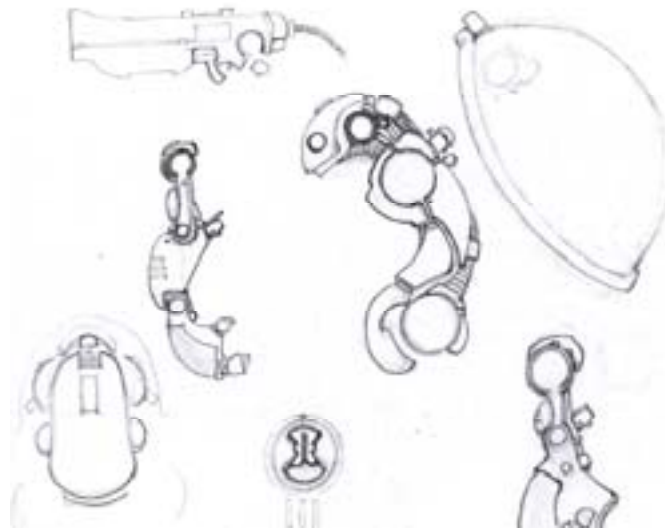


Figure 21: Sketch of the Tortoise (Later Transformed into Aremage for the XODIAK 12)

MaChine'sMYTH

fables fit for a technological time

meta4

XODIAK 12

Figure 22: Pre-production Sketch of Hare from the Classic Tortoise and the Hare Fable...Also, the First Recorded Reference to XODIAK 12.

# XODIAK 12



Figure 23: 12 Prints Representing the Xcions of the Technological XODIAK

It was in the final moments of the second year of graduate school that the idea of developing a technological zodiac system was born.  While the idea had some spark and I had begun to produce prints using the style and process that would of ultimately create the XODAIK prints, it was during the downtime between the second and final year of the program that the concept took real form and began to fully connect all of the work I had done in the past.  Without the pressure of having to produce projects for critiques I was free to explore the narrative elements that were meaningful to me, artistically.  I spent a lot of time reading and watching movies, studying children's literature and brushing up on world mythologies and religion to find the elements that had always inspired me to want to strive and create.  The thing that had been notably missing from much of my work in the past was the personal connection to an individual's life.  There hadn't been anything that was directly accessible for a viewer to identify with; nothing for the audience to take away from the experience and call their own.  Even in the highly

interactive pieces that required a user's participation, there was no component that they could look into and see themselves. My work had been missing the real human factor.

The XODIAK 12 began with the concept of illustrating the ways in which human beings have always developed art and fables to explain complex systems that exceed their capability to fully understand. In this case advanced computer technologies. As the project grew, it became much more about systemic interconnectivity and a search for meaning and purpose. The mythological character development that became the basis for the large digital prints were the seed from which this project grew, but it is the story that allowed for this work to flourish and begin to connect all of my work into a cohesive whole.

It is at this point that the work truly took on a life of it's own and my approach became largely intuitive. Years of watching cartoons and movies, reading comics and novels, playing music, studying philosophy, traveling, working as a web/graphic designer, and the past three years of graduate school poured into the work. The art was becoming its own dynamic creative system. Each bit of the story that I completed aided in the development of the design and layout of the character prints, which helped in the construction of the personality profiles, which in turn illuminated the relationship of the characters resulting in a more meaningful storyline. The work was feeding and sustaining itself and growing both logically and organically in a way that was actually yielding more work than I had even planned for. It was all I could do to keep up.

Included in the pages that follow are the storybook and character/personality profiles from the XODIAK 12 fable and interactive website. The creative development process for both is almost entirely the result of the dynamic interplay between the sum

of my life experiences (including my lifelong immersion in popular culture) and the evolving pantheon of characters represented in the digital images.  At a very basic level, the intention of the work is to connect people and their technology.   To communicate so fundamental similarities between how we describe our current relationship with technology and how human cultures in the past have utilized legends and myths and symbols to explain their connection to the complex systems that were intricately a part of their lives.



Figure 24: XODIAK 12 A Fable of Biomechanical Origins (back and front cover)



Figure 25: XODIAK 12 A Fable of Biomechanical Origins (Inside Front Cover and Page 1)

Figure 26: XODIAK 12 A Fable of Biomechanical Origins (Pages 2 and 3)



Figure 27: XODIAK 12 A Fable of Biomechanical Origins (Pages 4 and 5)

Figure 28: XODIAK 12 A Fable of Biomechanical Origins (Pages 6 and 7)



Figure 29: XODIAK 12 A Fable of Biomechanical Origins (Pages 8 and 9)

Figure 30: XODIAK 12 A Fable of Biomechanical Origins (Pages 10 and 11)



Figure 31: XODIAK 12 A Fable of Biomechanical Origins (Pages 12 and 13)

Figure 32: XODIAK 12 A Fable of Biomechanical Origins (Pages 14 and 15)



Figure 33: XODIAK 12 A Fable of Biomechanical Origins (Pages 16 and 17)

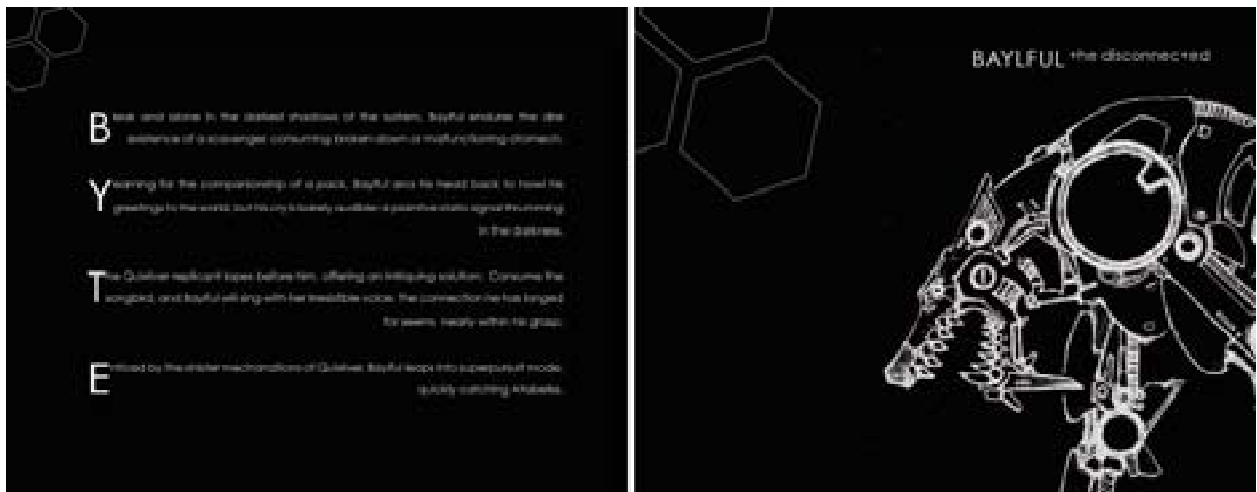Figure 34: XODIAK 12 A Fable of Biomechanical Origins (Pages 18 and 19)



Figure 35 XODIAK 12 A Fable of Biomechanical Origins (Pages 20 and 21)

Figure 36: XODIAK 12 A Fable of Biomechanical Origins (Pages 22 and 23)



Figure 37: XODIAK 12 A Fable of Biomechanical Origins (Pages 24 and 25)

Figure 38: XODIAK 12 A Fable of Biomechanical Origins (Pages 26 and 27)



Figure 39: XODIAK 12 A Fable of Biomechanical Origins (Pages 28 and 29)

MIND the path behind you | MARK the path beneath you | MAKE the path before you | you are more than just a number |

Figure 40: XODIAK 12 A Fable of Biomechanical Origins (Pages 30 and 31)

visit www.nthmedia.net/XODIAK for more



Figure 41: XODIAK 12 A Fable of Biomechanical Origins (Page 32 and Inside Back Cover)
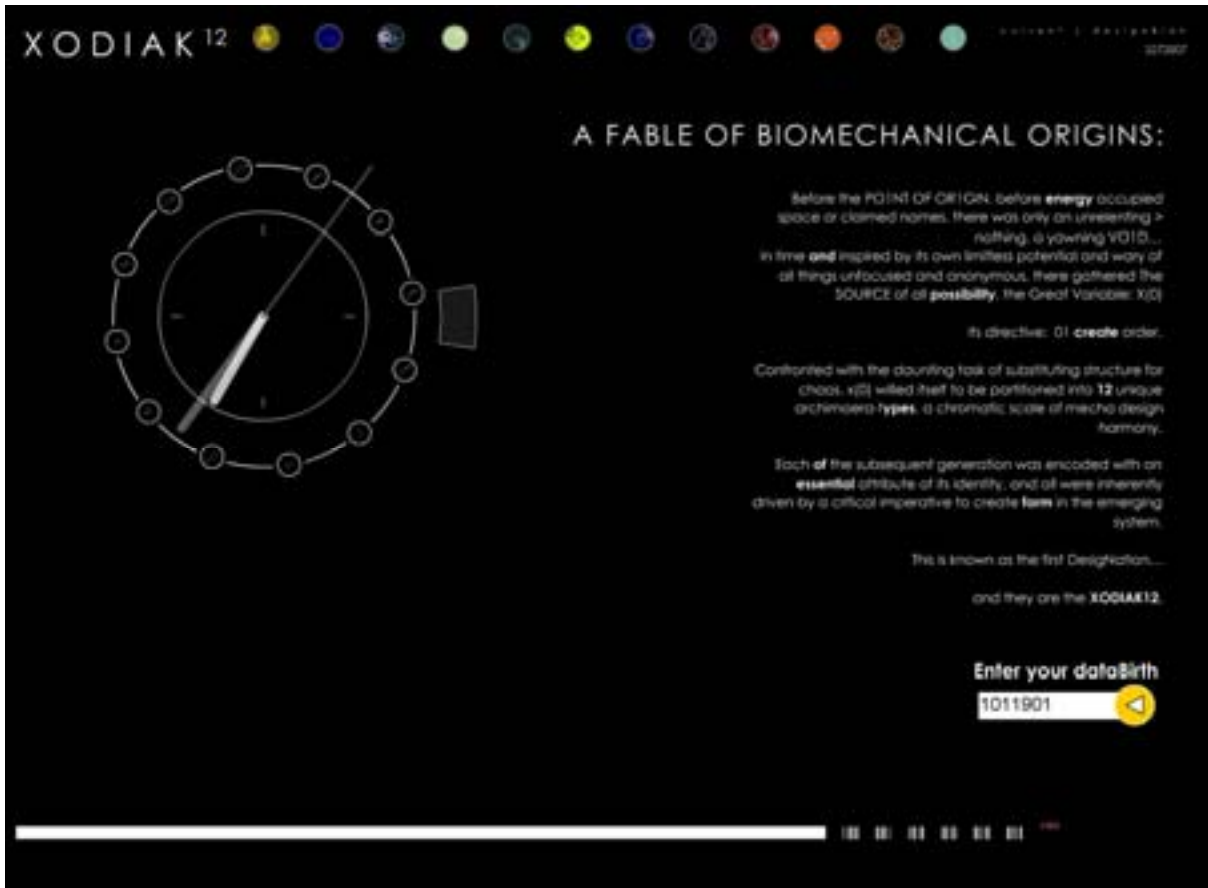
Figure 42: A screenshot of the XODIAK Codex Web Site, the interface used to look up your xcion and generate your technopathic prediction

NUM1 +he archi+ek+

Those born into Numi's nurturing light
grow quickly in optimum environments,
and generally burn with their own light.
With tendencies towards brilliance
and concision, Numiirions will have sharp
focus on the task at hand, and can
not only originate concepts but bring
them into reality, delegating all legwork
efficiently.  Numiirions make excellent
entrepreneurs, particularly in the
magazine/television/restaurant fields.
They make excellent chefs, and of
course, architects.  Unfortunately, a
strong light throws a dark shadow, and
many Numiirions will be drawn to the next
sun, abandoning the project once it is
underway.  Most of the time, this works
out fine based on strong principles and
foundations.  Most of the time.

Figure 43: NUMI (Xcion for those born in January) and Character/Personality Profile

## KHALIPER +he cri+ical

Those who sit with Khal1per are granted with oversight. They have the ability to see patterns in wholes. They do well as politicos or stock analysts, traffic helicopters pilots and those who partake in the hard sciences. While occasionally self-important, Khal1persons are aware of the power of broadest view, of context. They are also, often, tenured professors who feel strangely at peace at high elevations. The typical Khal1person can be quick to judge, but is often right. That they do not take criticisms well may be an understatement.

Figure 44: KHALIPER (Xcion for those born in February) and Character/Personality Profile

AREMAGE +he s+able

Anyone who has an Aremage for a friend sleeps just a bit better at night. Everyone who is an Aremage, well, sleeps a little bit less. This is person who we can count on, every time. They are there at the emergency room with you, and brought your favorite blanky, at the precinct with bail, and no questions til after the first drink. When you are an Aremage you just know what everyone needs and see no reason not to give it to them. They need it. No one is ever upset when you arrive because it means everything is going to be ok. Aremages make good lawyers, good city planners, and property managers of surprisingly affordable rentals. Aremages have to fight their own instincts if they want to be excellent spouses or partners because they are (naturally) taking care of everyone else. Forget about taking care of themselves. They can tend to be overweight, or have poor or no skills to deal with stress.

Figure 45: AREMAGE (Xcion for Those Born in March) and Character/Personality Profile

## DEUCEL +he con+iguous

Deucellians are tricky. They are hungry and smart, and they have two mouths to talk out of. They are popular politicians, questionable world leaders and poor law enforcers. They are attracted to helping others, but with a price. If not Mafioso, they enjoy the Sopranos, intrigue, and very old theatre that displays archetypes and their interactions (this is school for them). Deucellians are not malevolent, they have a very strong (and not entirely inaccurate) sense of self-worth. They can feel remorse, but it is always brief.

Figure 46: DEUCEL (Xcion for Those Born in April) and Character/Personality Profile

GRAYSENT +he finder

Graysentries are the unlikely combination of honor and creativity. Detail oriented, they are problem solvers who benefit from a strong sense of justice. They have initiative...however, this can put them at odds with others who want to take their time debate an issue. They do not do well with conflict. Graysentries are at the watchtowers, but their observations tend to scan the intricate detail of the landscape, rather than surveying the greater whole. They are music lovers who may call in to work when the wind whistles too sweetly through the window, or the sun is shining just right. But you can count on them in a fix, they will work a double shift, proofreading, coding or watching every radar screen from the airport tower when they are needed. Never spending too much time at their work. Graysentries know the value of balance and they'll always remember to come down just often enough to be indispensable as a friend.

Figure 47: GREYSENT (Xcion for Those Born in May) and Character/Personality Profile
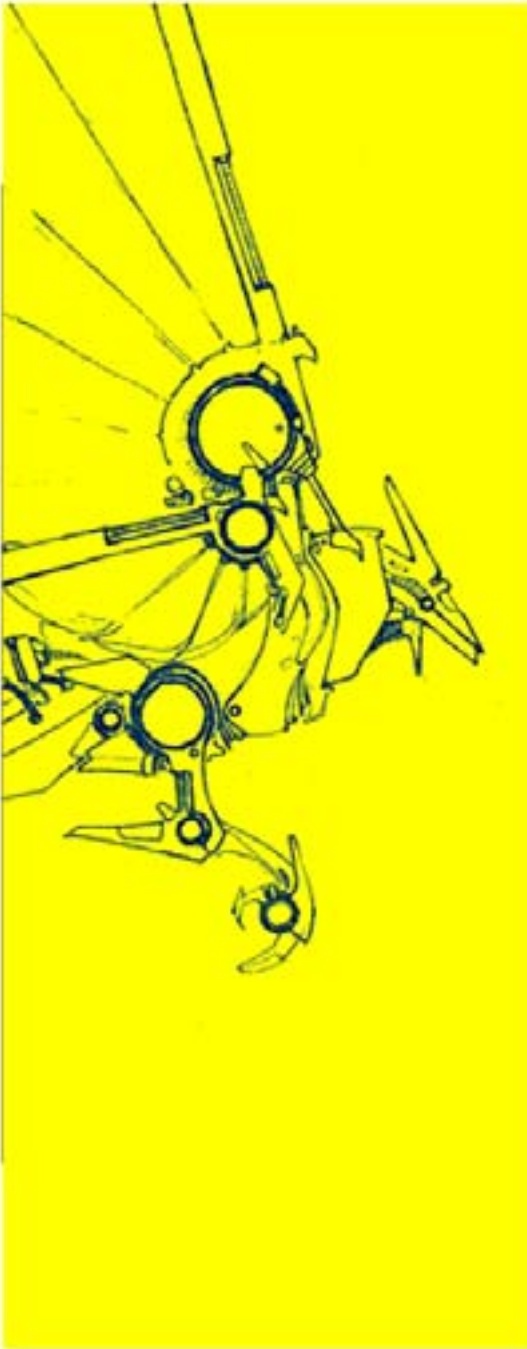
ATABEL1SS +he resonan+

Atabel1ssts are pure talent but for their
ambition. They are somehow the
youngest and strongest of the Xodiac.
They are certainly fetching and when not
overwhelmed with attention will seek it
out, like plants will turn towards sunlight,
or birds into the wind. Atabel1sst's stories
are still seedlings, mind though, how
youth and talent in combination is a
powerful force, thought at this point,
more unformed than formed. Potential
energy.

Figure 48: ATABELISS (Xcion for Those Born in June) and Character/Personality Profile

53

QUIXILVER +he con+agion

Quixilvyns are necessary in all stories, on all worlds. They are the trixters and are to be considered cautiously. Their sense of honor was warped early but they are honoring something. We do not know their motivation but they do. They are not random. You, Quixilvyn, you scoff at our attempt to understand you. You may nod at our guesses – you wait and you watch and you know things we don't. You know more about breaking than fixing, and see the power of pieces. the power between pieces – the stuff that creates the whole. You, of course. love demoltion work. love reality TV, love evangelism. Your viruses and your vices are superb. You are everywhere and you know it. Or perhaps, you dont.

Figure 49: QUIXILVER (Xcion for Those Born in July) and Character/Personality Profile

BAYLFUL +he disconnect+ed

Baylfullers do not want to be clichéd. They are aware of the idea of the lonewolf, and aware that being painfully shy sometimes is not endearing, contrary to some beliefs. Baylfuller is a hard worker, doing many jobs that are overlooked, forgotten – accountants, actuarials, and yes, trash collectors and middle management. They are lonely a lot. But have found secrets to endearing themselves. Baylfullers will do that favor for you, and will believe you, that you will follow through with whatever you promise in return. They can be very good friends, dependable, secret-keepers but do not cross them. Bayfuller has no bark to warn you, and couldn't be any shyer..And so contrary to the familiar tropes, once a Baylful's been bitten..he WILL bite back.

Figure 50: BAYLFUL (Xcion for Those Born in August) and Character/Personality Profile

SIMIAN PR1ME +he cas+igator

S1m1anPr1mus is plagued by intellect and by empathy. To a fault. Impulse control issues notwithstanding, S1Psses are motivated by justice, and an act now think later attitude. They are not thinking of themselves, of the family, of safety, of individual and intravidual peace, they do, as they feel thay have to. S1Psses are boxers and sportsmen/women, they are bloodthirsty chieftains, they are CEOs for nonprofits. They are passionate, and deep inside, see themselves wearing capes, leaping from buildings...even when no one has asked them to.

Figure 51: SIMIAN PRIME (Xcion for Those Born in September) and Character/Personality Profile

TEKURA +he +ransis+or

Tekuraals create peace and stability in response to the emmanating waves of turbulence all around us, much like how gravity smoothes the ripples in a pond, or maybe thunder drowning gunfire. Tekkurrans abhor conflicts, particularly the violent kind – they are also almost eerily gifted in creating harmony. Sympathetic and empathetic they are closely inTune with the emotional state of others; and they are often psychic to some degree or another. It is not a surprise that they make superb mediators, couples or family therapists and, maybe more surprisingly, bouncers at clubs. Tekuraals enjoy being involved in network communications, global issues, and social crusades; Infiltrating systems for the better good. Tekuraals often have shady pasts and you may get the sense that their ability to sense danger stems from the troubles they have lived through. They bear many burdens, but also carry grudges for far too long. In the dark corners of the night after everyone is asleep they curl up with their doubts and wonder how much good one person can really do.

Figure 52: TEKURA (Xcion for Those Born in October) and Character/Personality Profile

PHAEGUS +he mindful

Phaeguns are so patient you may forget they are there. They are so still you forget they are irreplaceable; like a load-bearing column, or the enormous elm in the yard. Phages do not get out much, and when they do...its way, far out. They are deep in meditation in an ancient monastery or asleep at their desk after hours still dreaming of the lines of code they have yet to write. Often lost in thought, they know of the tides and the moons, and ponder deep mysteries and calculations while others stress over tactical concerns. Uncanny tunesmiths, you'll hear them quietly musing a pitchperfect tuneless hum as they go about the day a wordless whistle that seems strangely familiar. They are esoteric philosophers and if this profile is too airy for you, too lost in the ether, than you are not likely a Phaegun. A Phaegun understands how sometimes metaphor is as close as we can get to a truth, a common tone...unfortunately, this can make basic, daily communications difficult at times. When there is trouble though, that wordless whistle becomes a tome of help, the sky can opening and everyone will be saved. Massive in their thinking and action, they may step on others feelings in their efforts in their grand interventions.

Figure 53: PHAEGUS (Xcion for Those Born in November) and Character/Personality Profile

## SAFTDA +the nodal

Saftdans illustrate, narrate, and illuminate the world, though their light radiates differently than Numer1ans or Atabelists – the Saftdan's light is dusk, dawn – it is a slow nurture and a glow. Saftdans create order through knowledge exchange, sometimes building structures stronger than any mediator or architect. It is through the transmission of information that they connect all the others. Frequent storytellers be careful not to mistake the engaging tales for factual accounts: Accuracy is the business of a Khaliperson. They are exceptional conversationalists, but dont let a them get off on a tangent, they can go on...and on. They like to share...a lot; Be careful extending pleasantries or polite offerings to a Saftdan, they dont always know the limits of these exchanges and they tend to perceive all things as belonging to the community.

Figure 54: SAFTDA (Xcion for Those Born in December) and Character/Personality Profile

Figure 55: A Photograph Taken at the MFA Show

Figure 56: A Photograph of The 12 XODIAK Prints from the MFA Show

Figure 57: A Photograph of the Otomechs in Action from the MFA Show

# COLLATERALS

I've opted to include the ReGenerator Series in its own chapter of this thesis because, like the Automech of the Cortex Experiment, it has been fully integrated into the presentation of The XODIAK 12 project, but remains an independent body of work. Those readers who attended the MFA thesis exhibition will remember these pieces as the dynamic animations being displayed on the 3 large plasma screens on the walls. Thematically, the ReGenerators (M path, 4mation, and chroma) are more closely linked to the ideas developed in the Cortex Experiment (repeated movement of a number of component elements that interact with one another and produce an engaging visceral experience over time), but they manage to overcome most of the production difficulties inherent in the Cortex work.

As a supplemental addition to the overall XODIAK experience these pieces also were allowed to take on a unique, almost aloof status amongst the rest of the work. Developed very quickly and intuitively in the final couple of weeks of the program, they both literally and figurative represent the cycle of creativity. Also, it is worth noting that these critically well regarded pieces were developed exclusively using the two skill sets I had struggled so tirelessly in the beginning of the program to avoid: hand drawings and multimedia web design. Sometimes, at the end of things, it's good to return home.
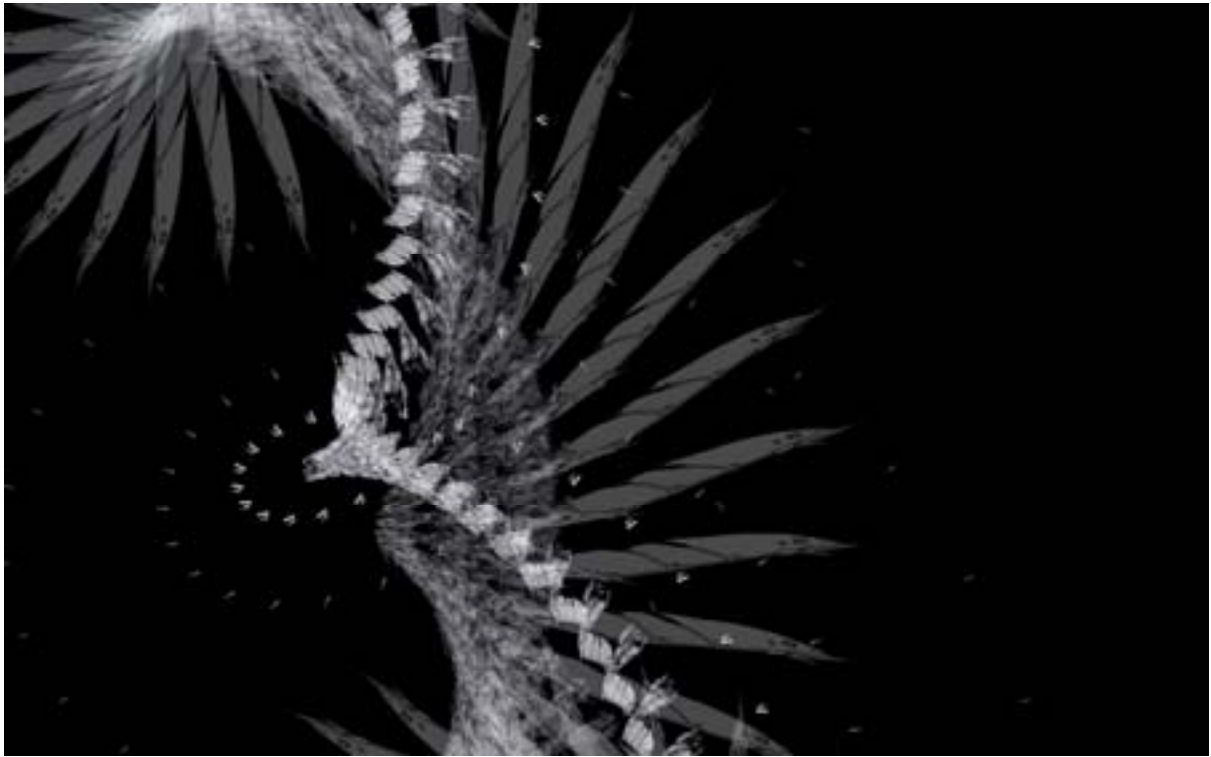
Figure 58: Mpath 1
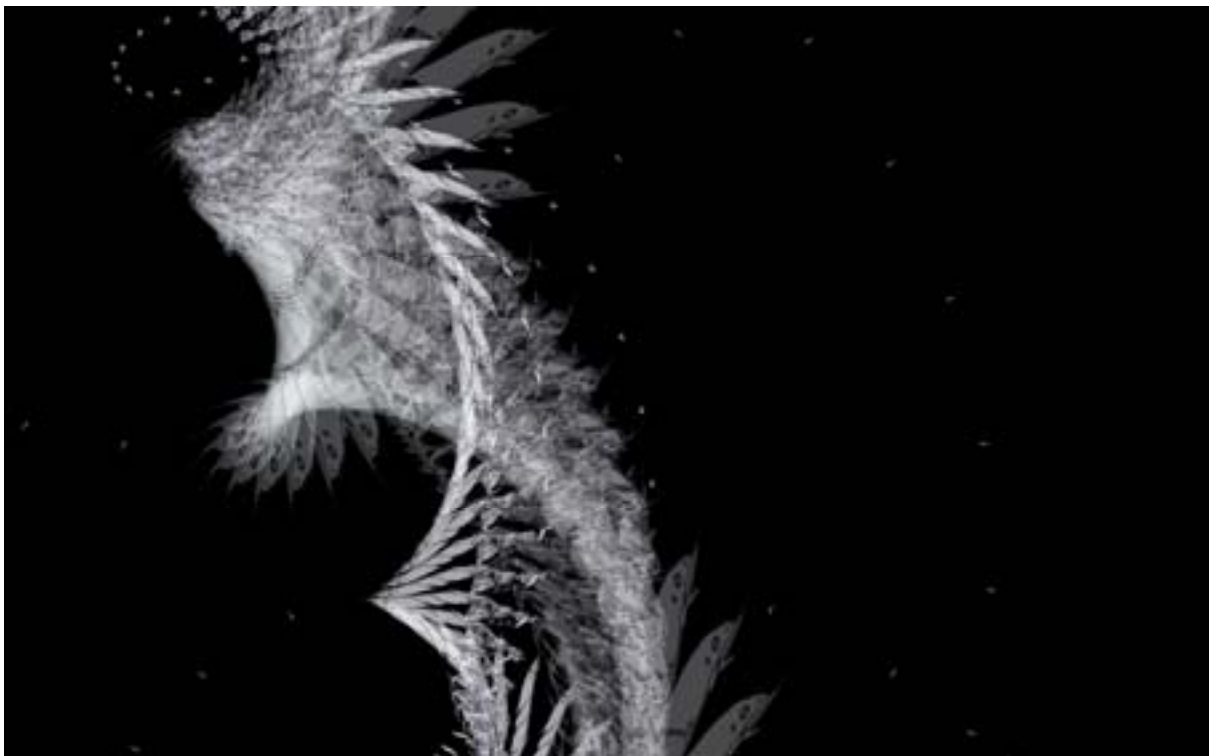


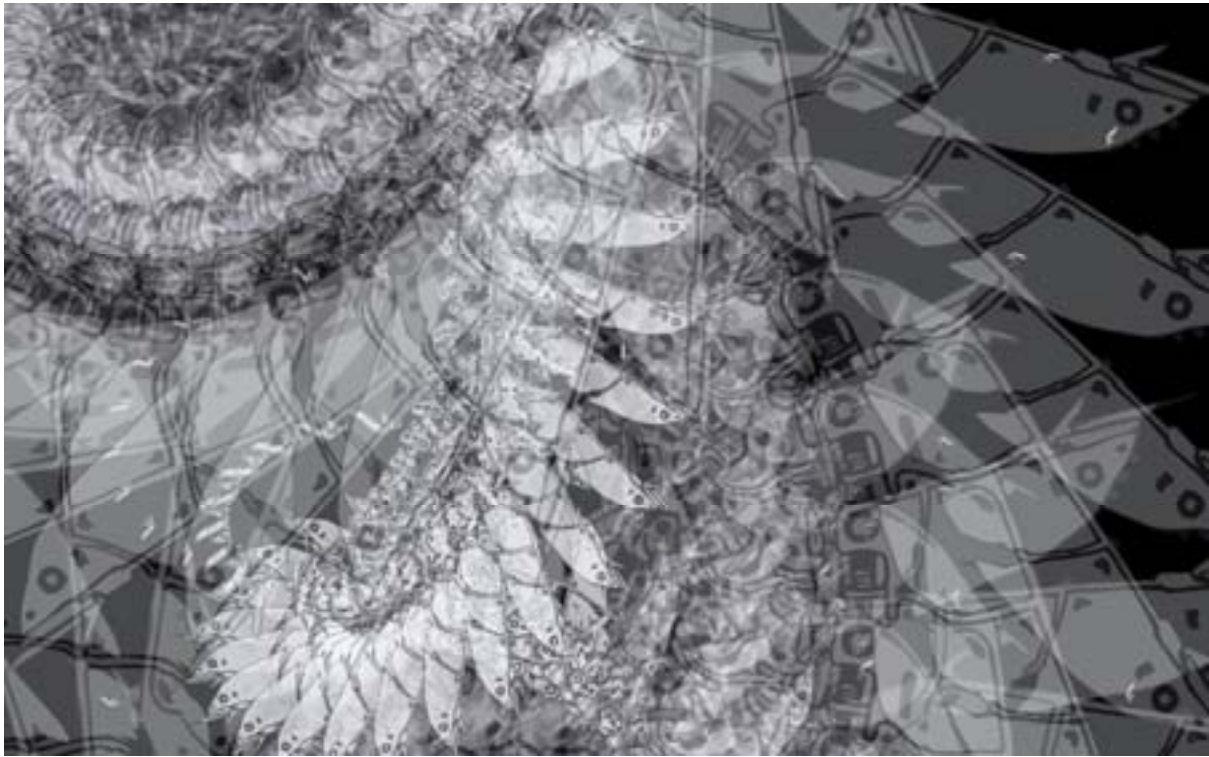Figure 59: Mpath 2
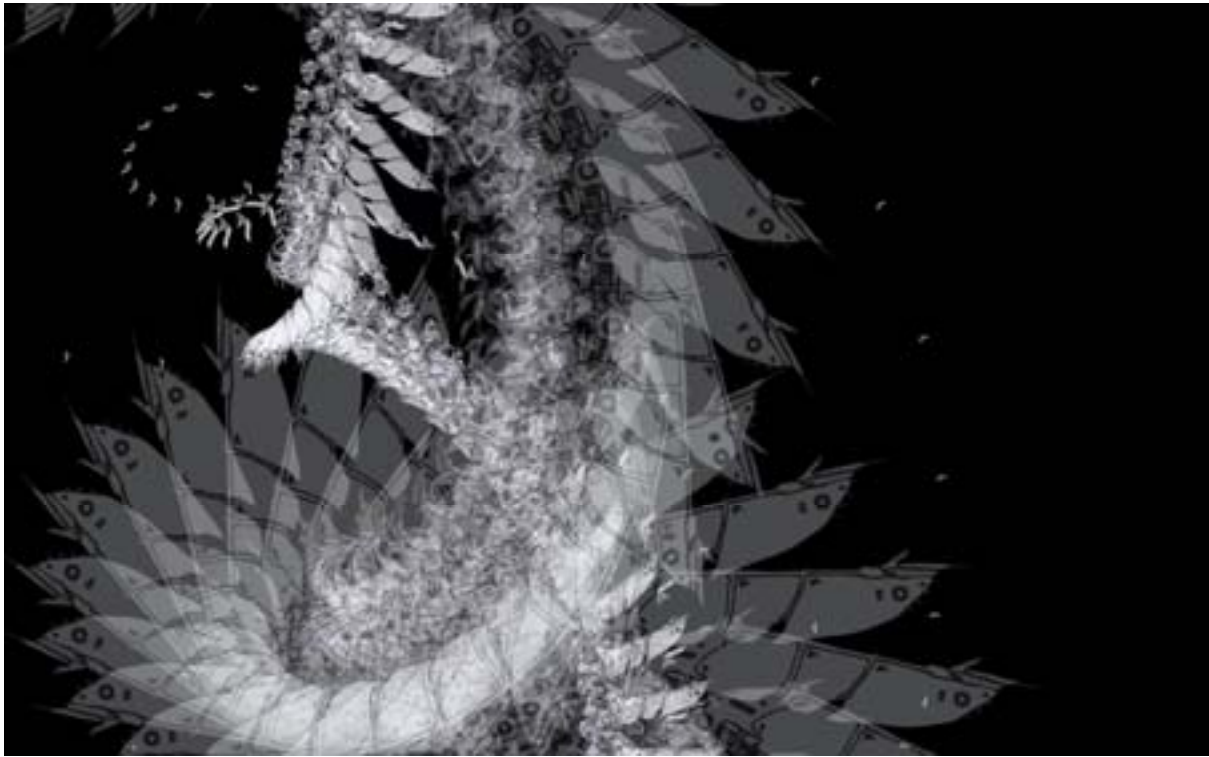
Figure 60: Mpath 3
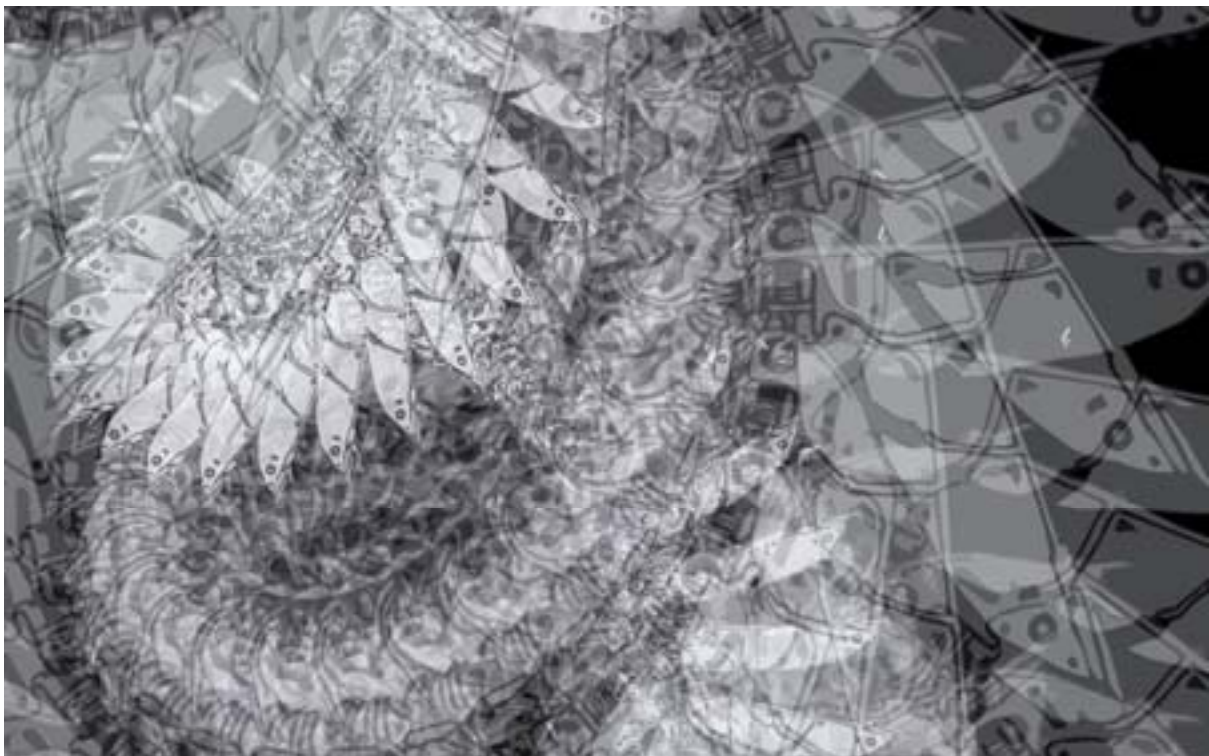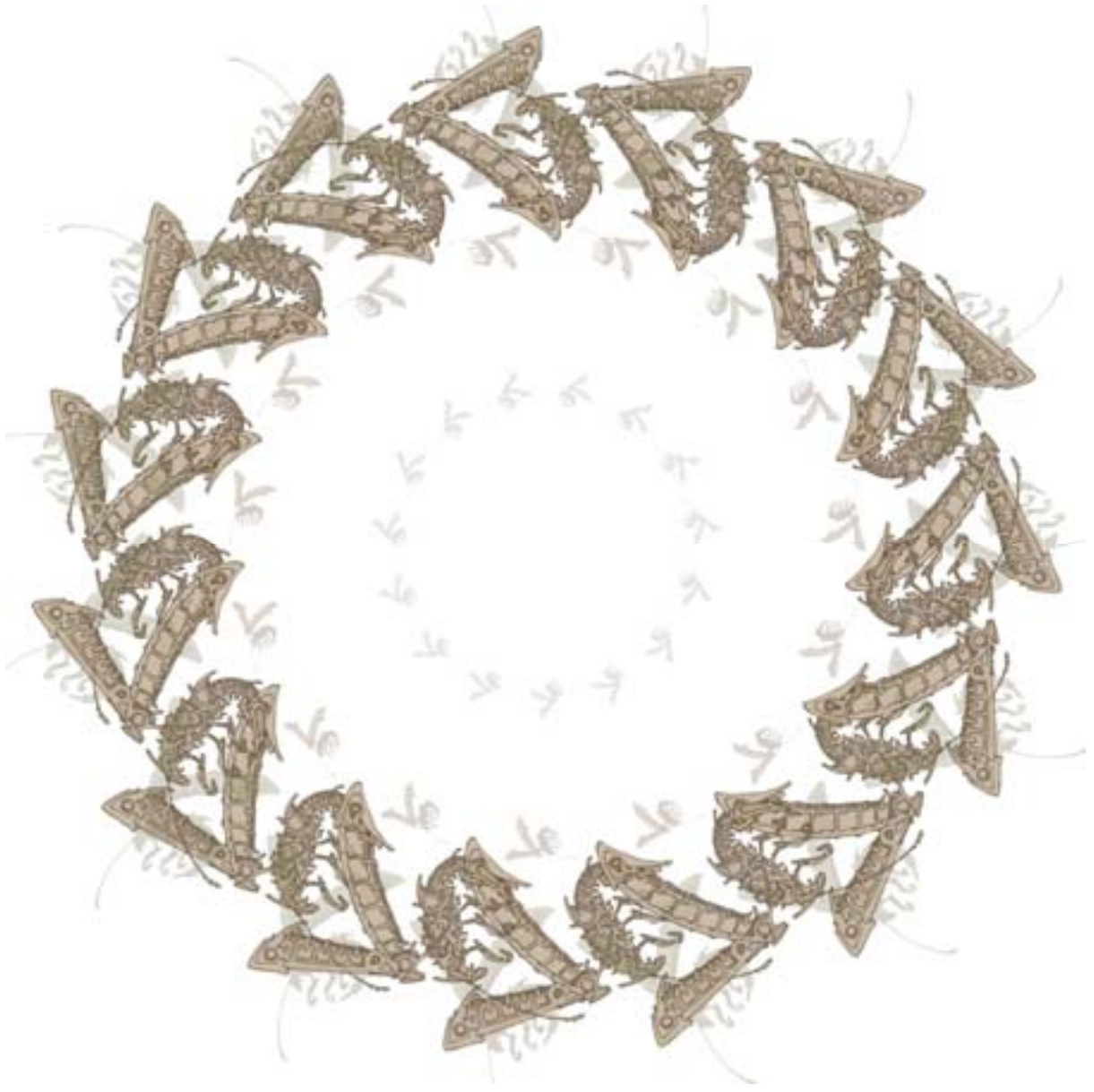


Figure 61: Mpath 4

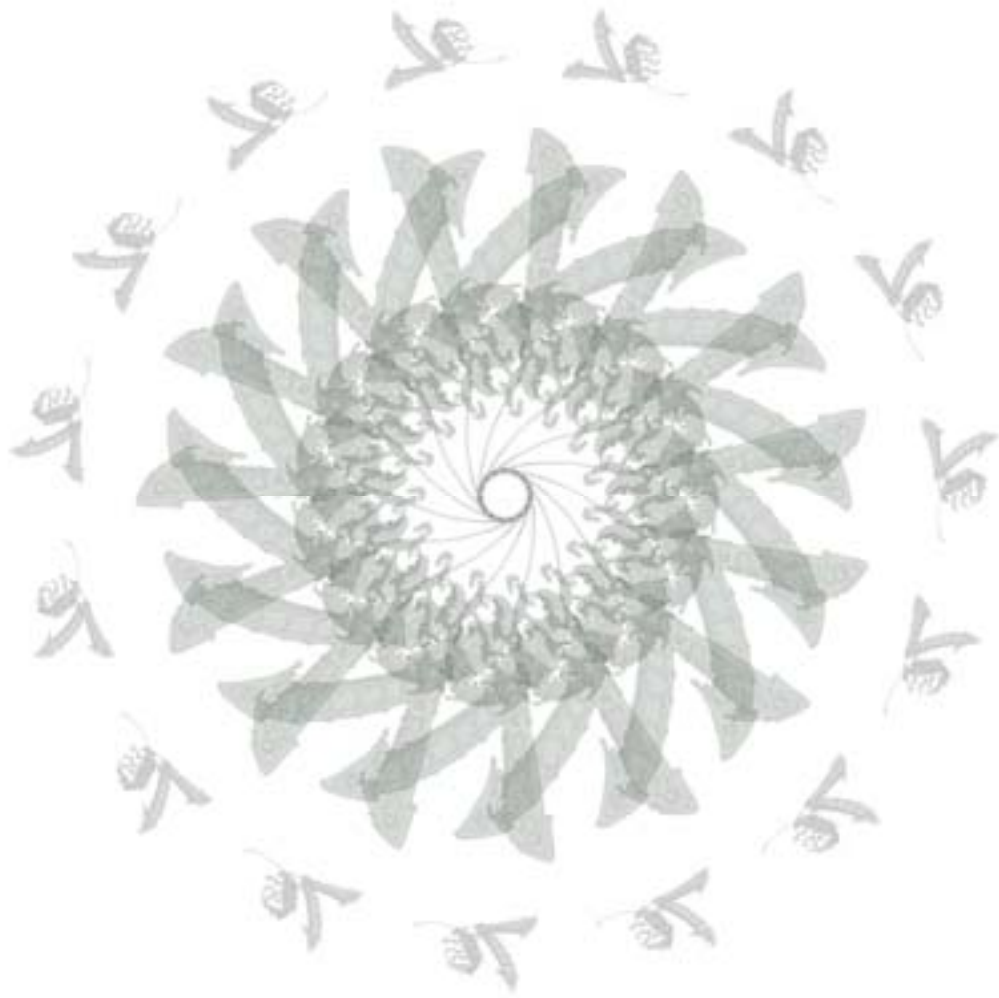Figure 62: Mpath 5

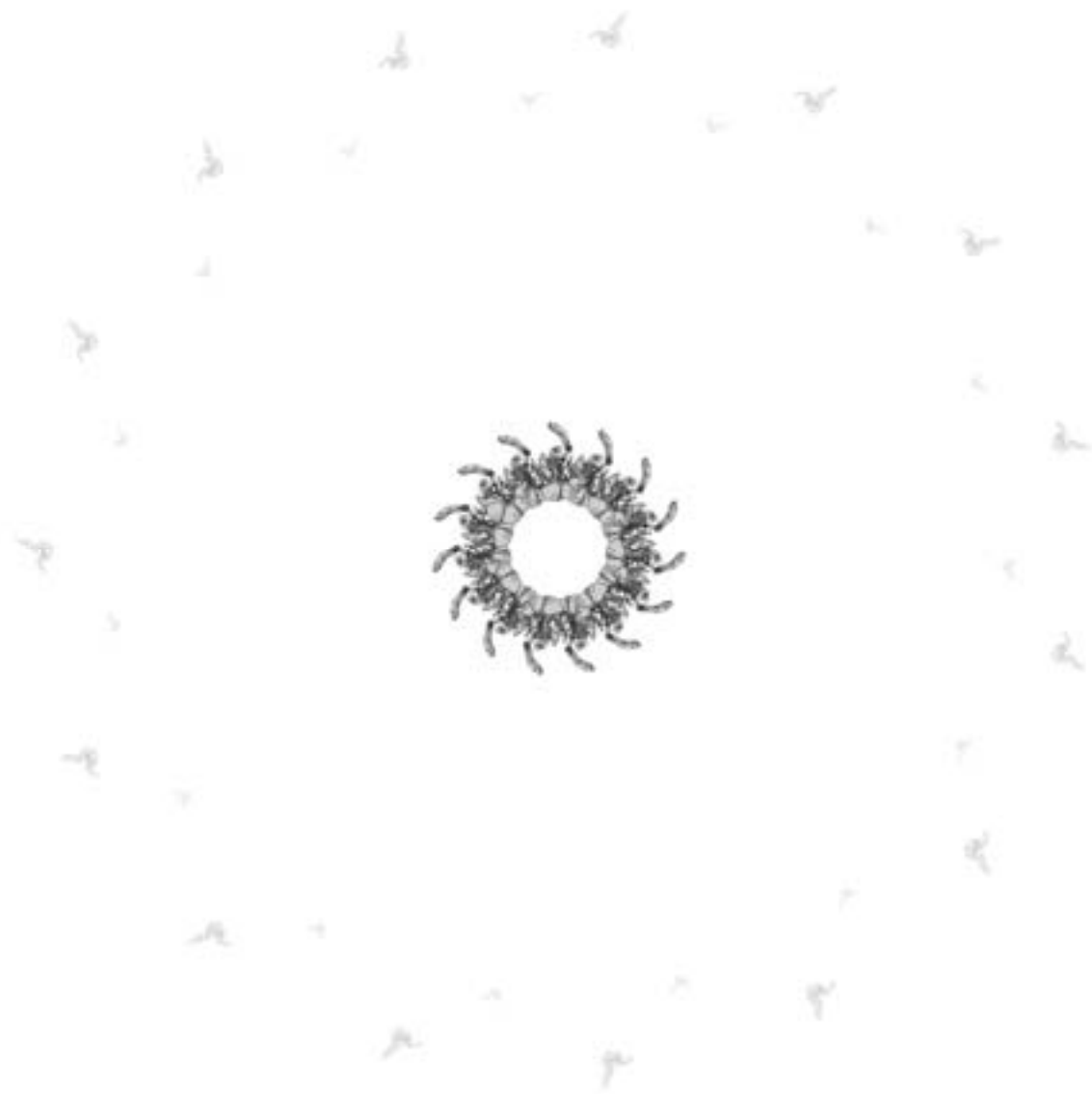Figure 63: 4Mation 1

Figure 64: 4Mation 2
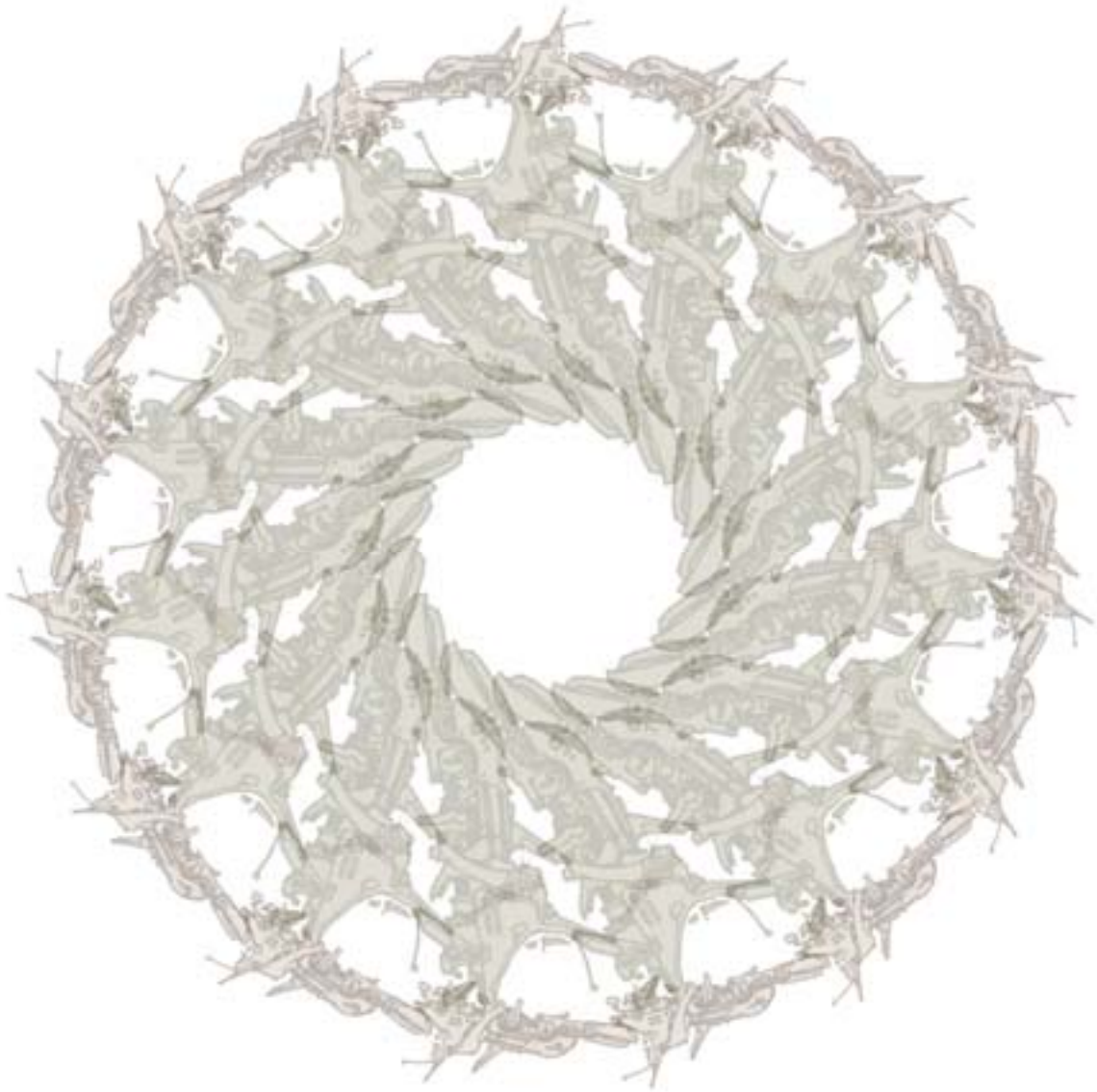
Figure 65: 4Mation 3

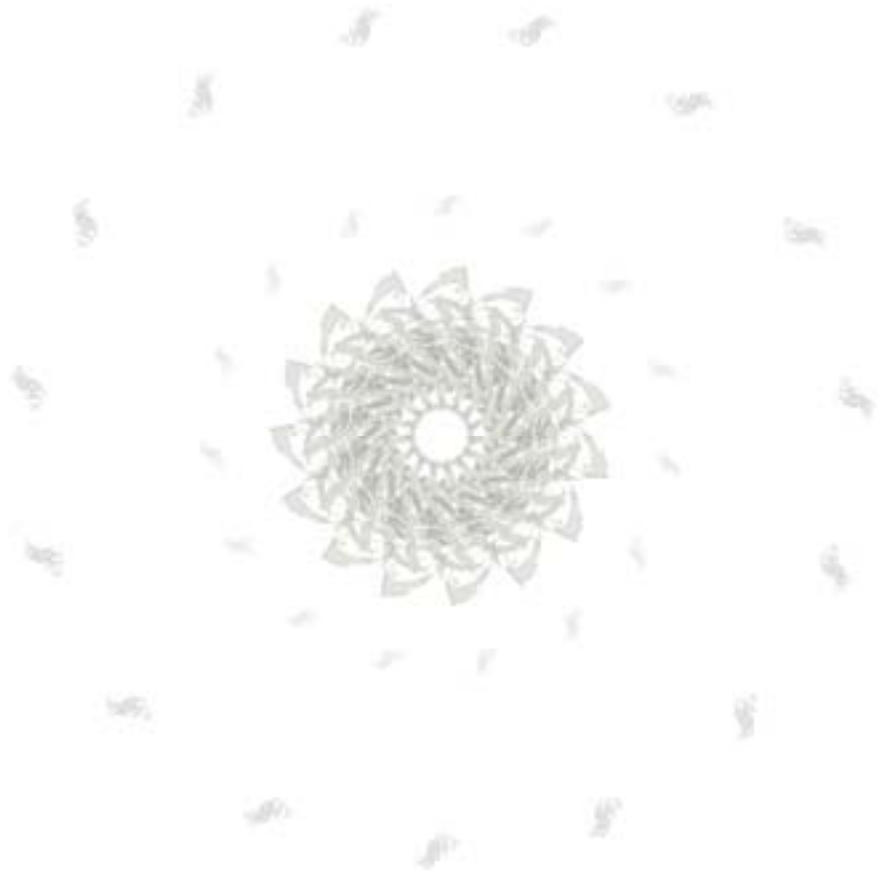Figure 66: 4Mation 4

Figure 67: 4Mation 5
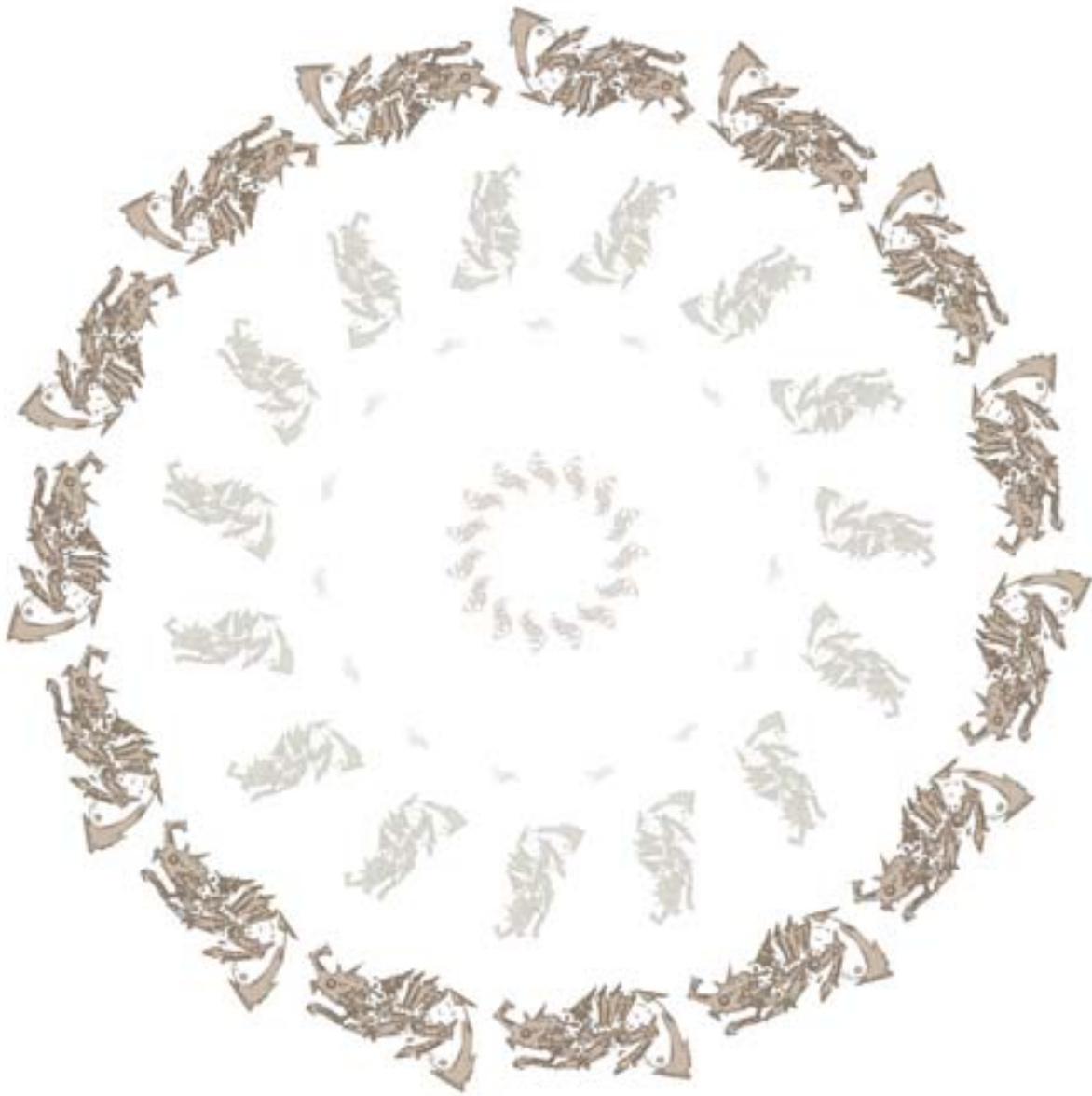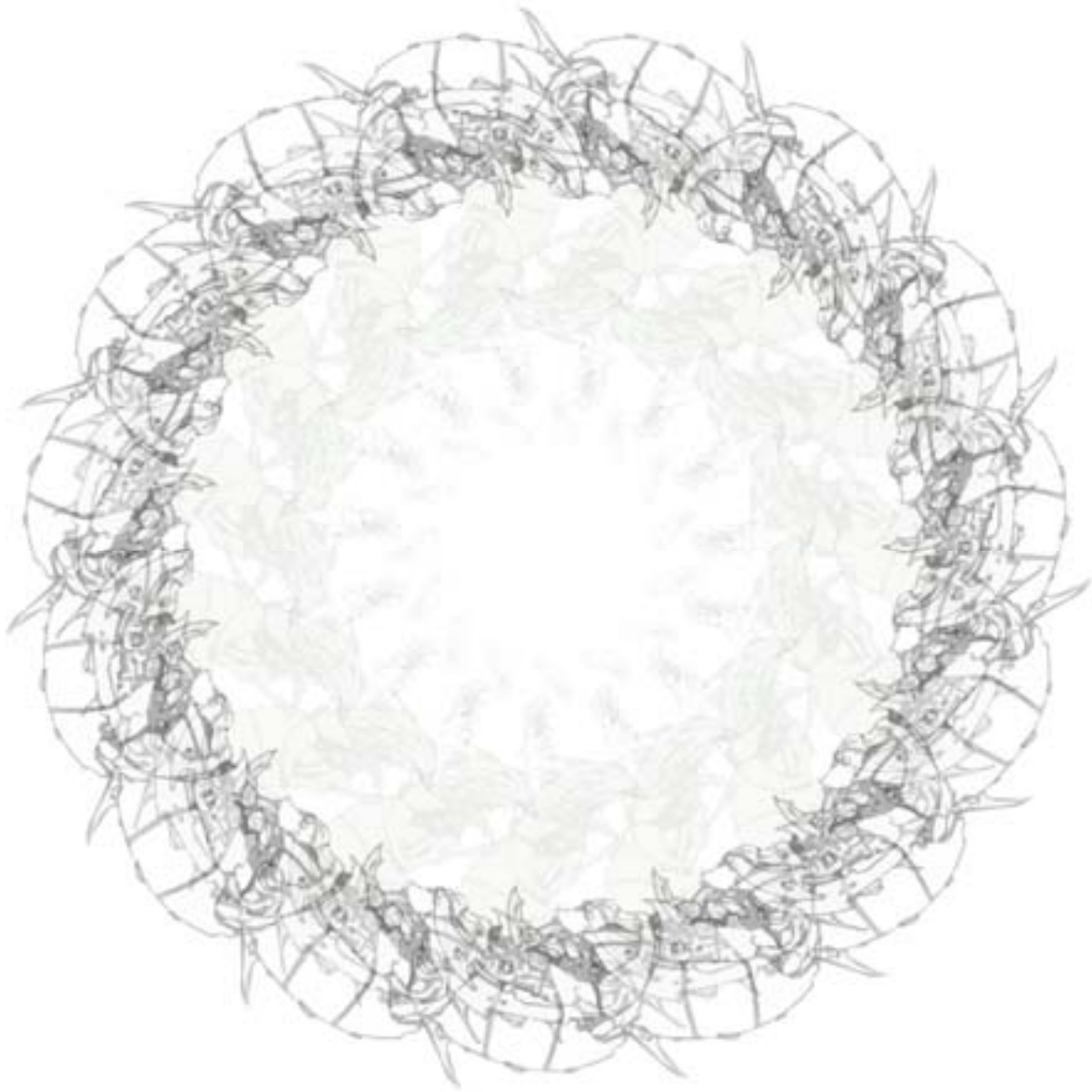
Figure 68: 4Mation 6
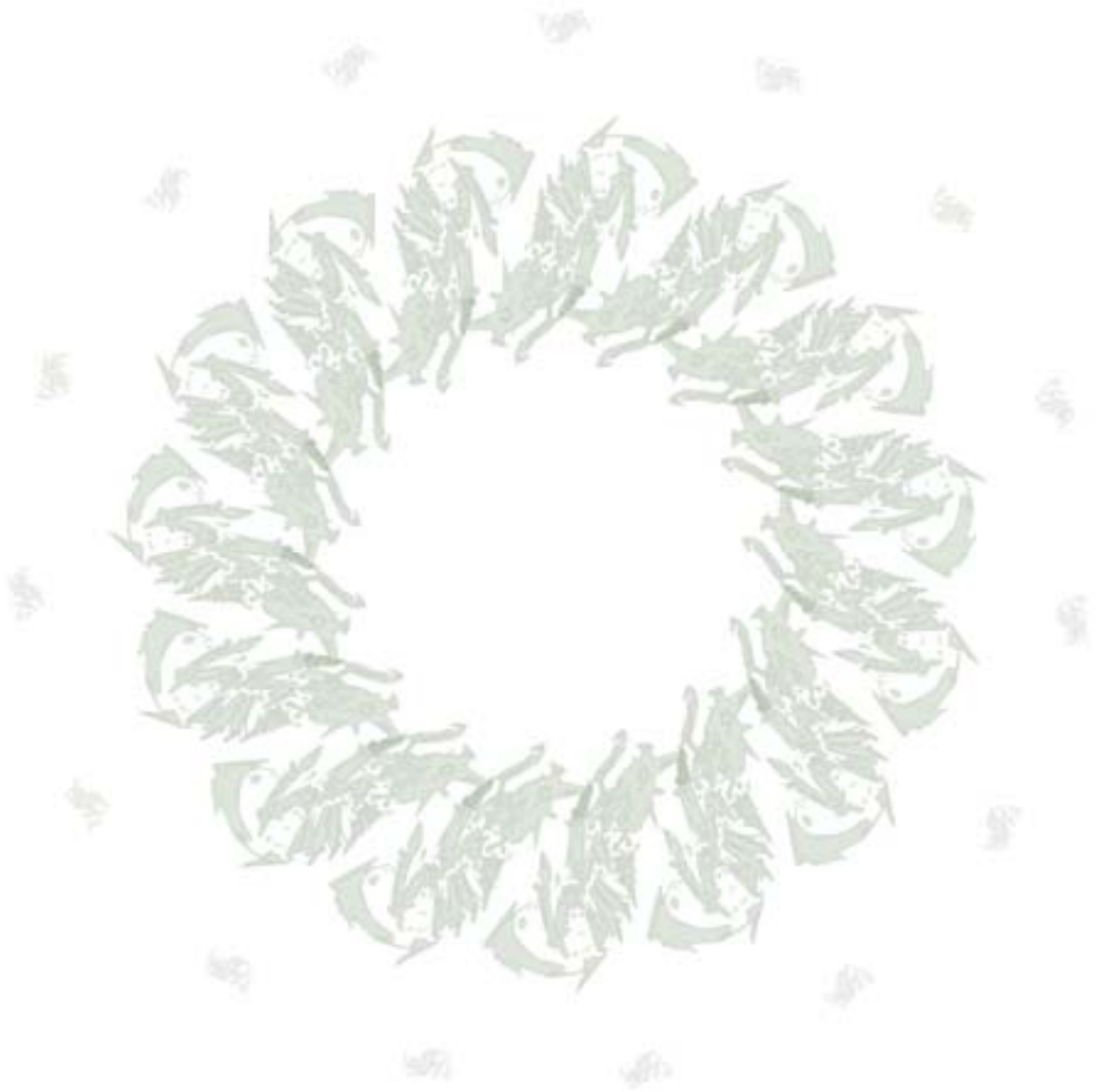
Figure 69: 4Mation 7

Figure 70: 4Mation 7

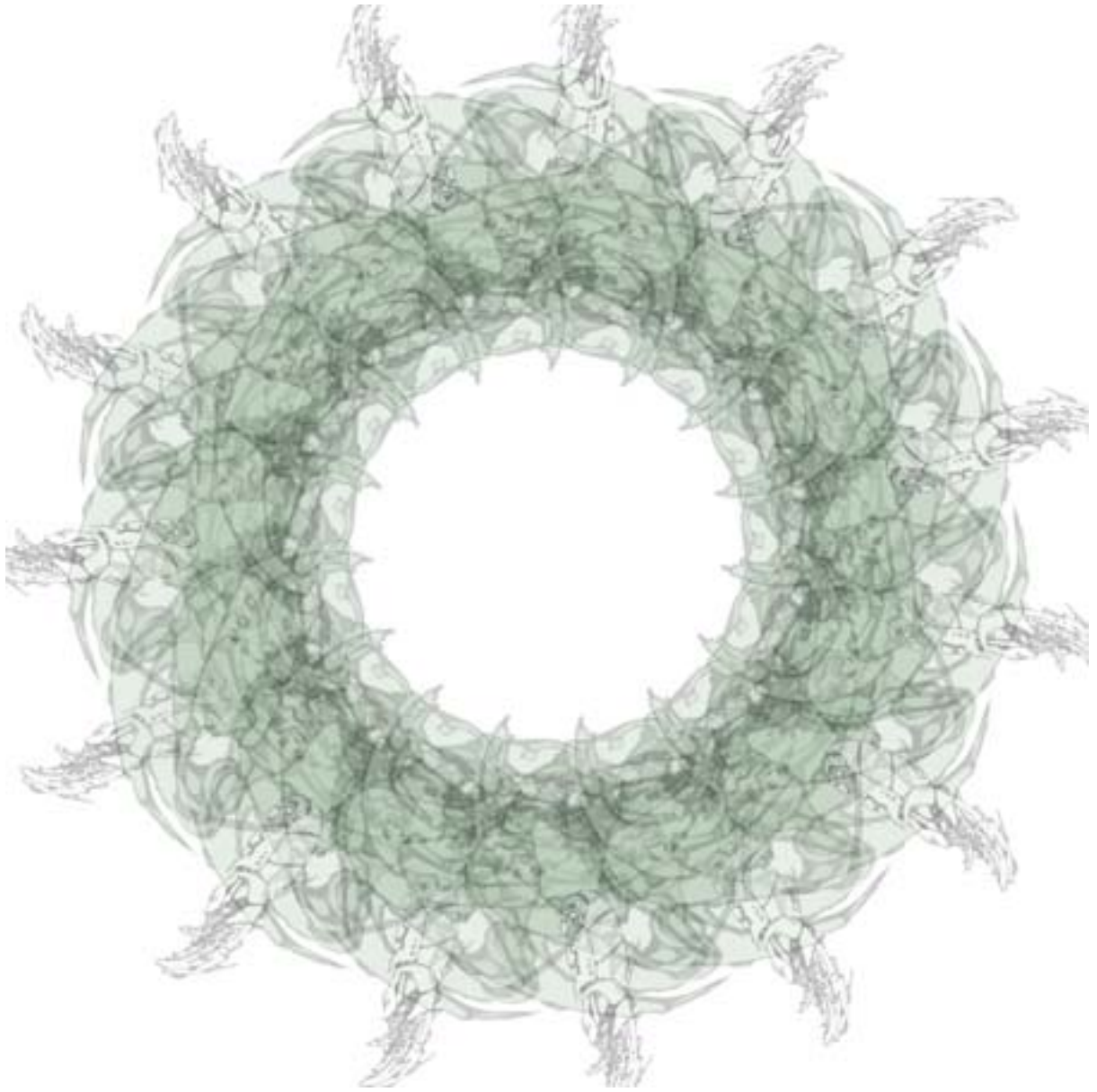Figure 71: 4Mation 8

Figure 72: 4Mation 9
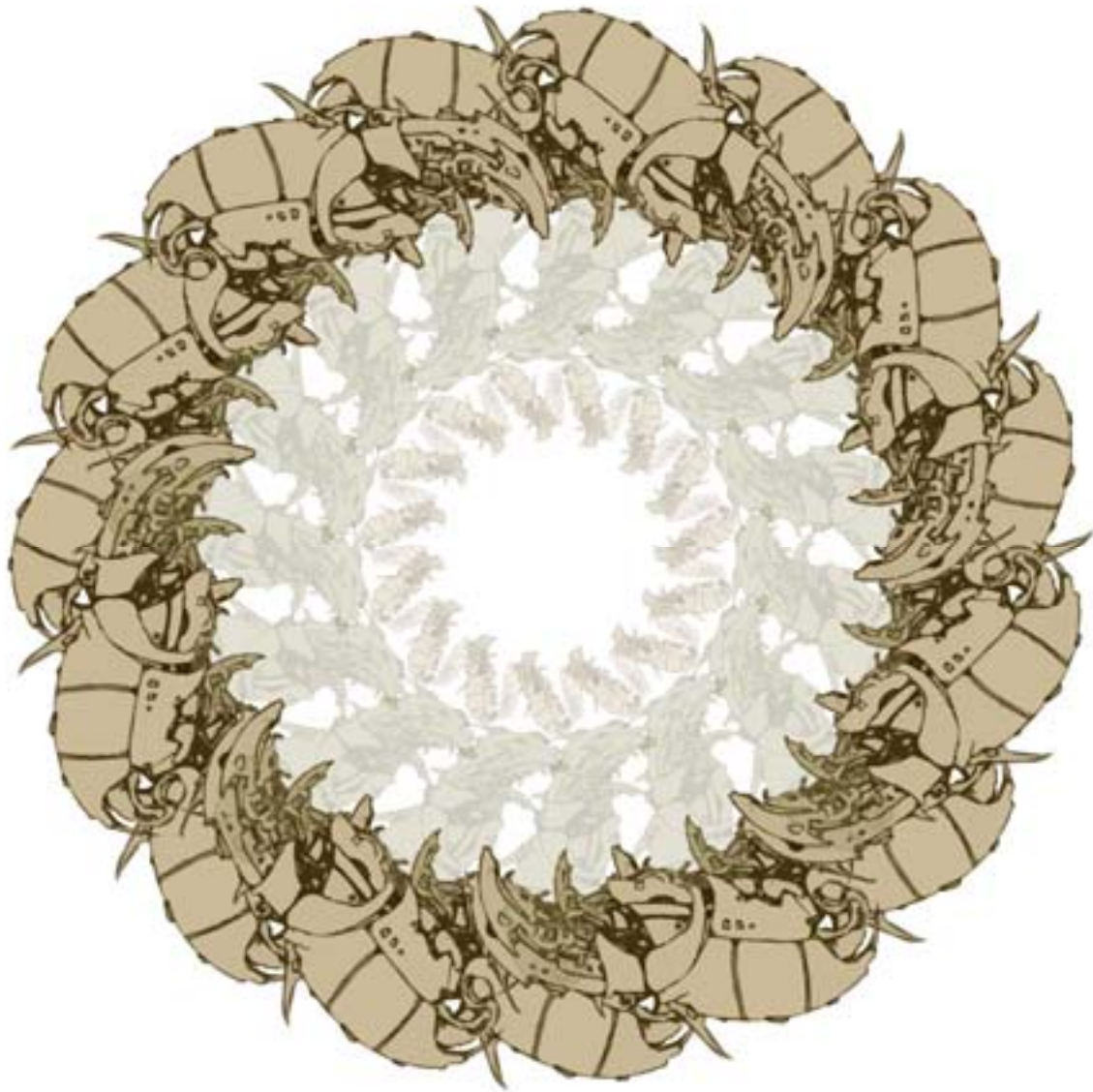
Figure 73: 4Mation 10
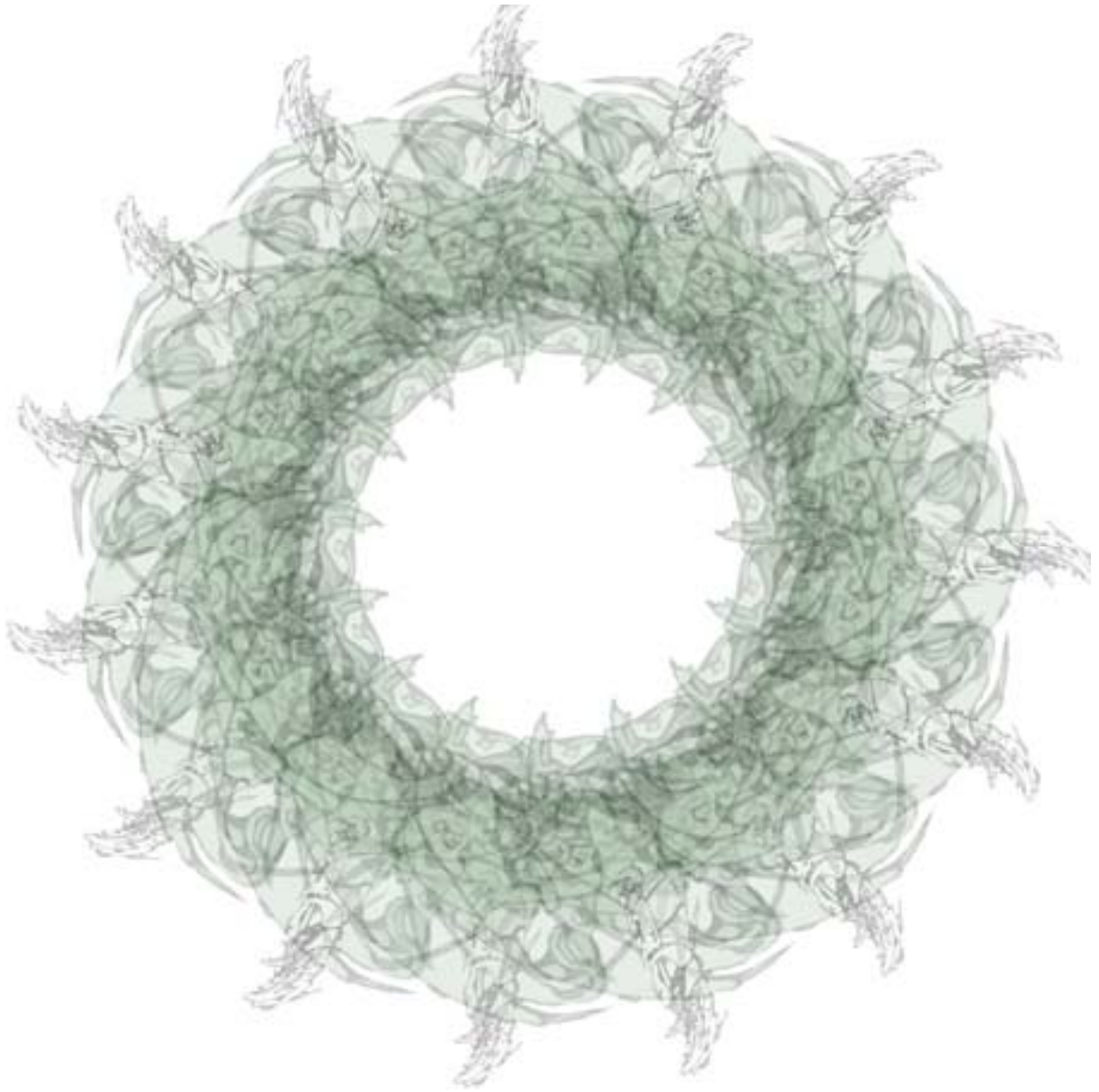
Figure 74: 4Mation 11

Figure 75: 4Mation 12

Figure 76: Re:generator Chroma 1



Figure 77:  Re:generator Chroma 2

Figure 78:  Re:generator Chroma 3
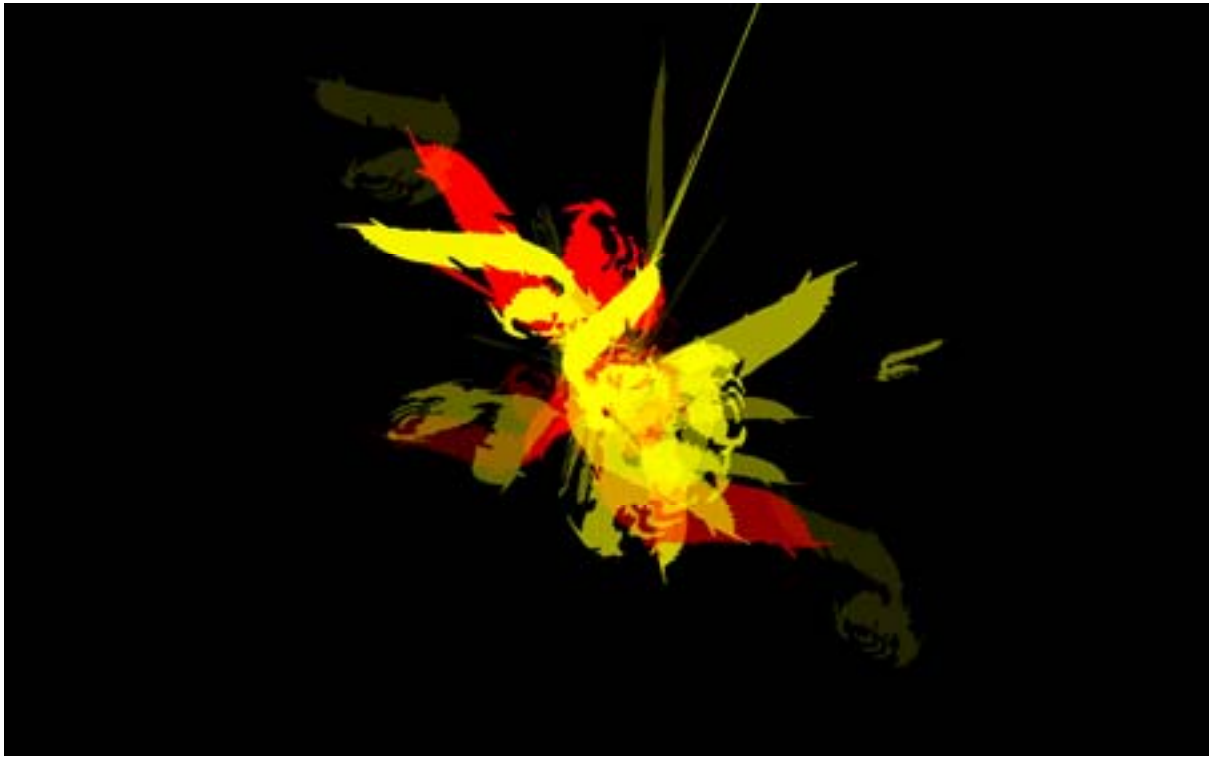


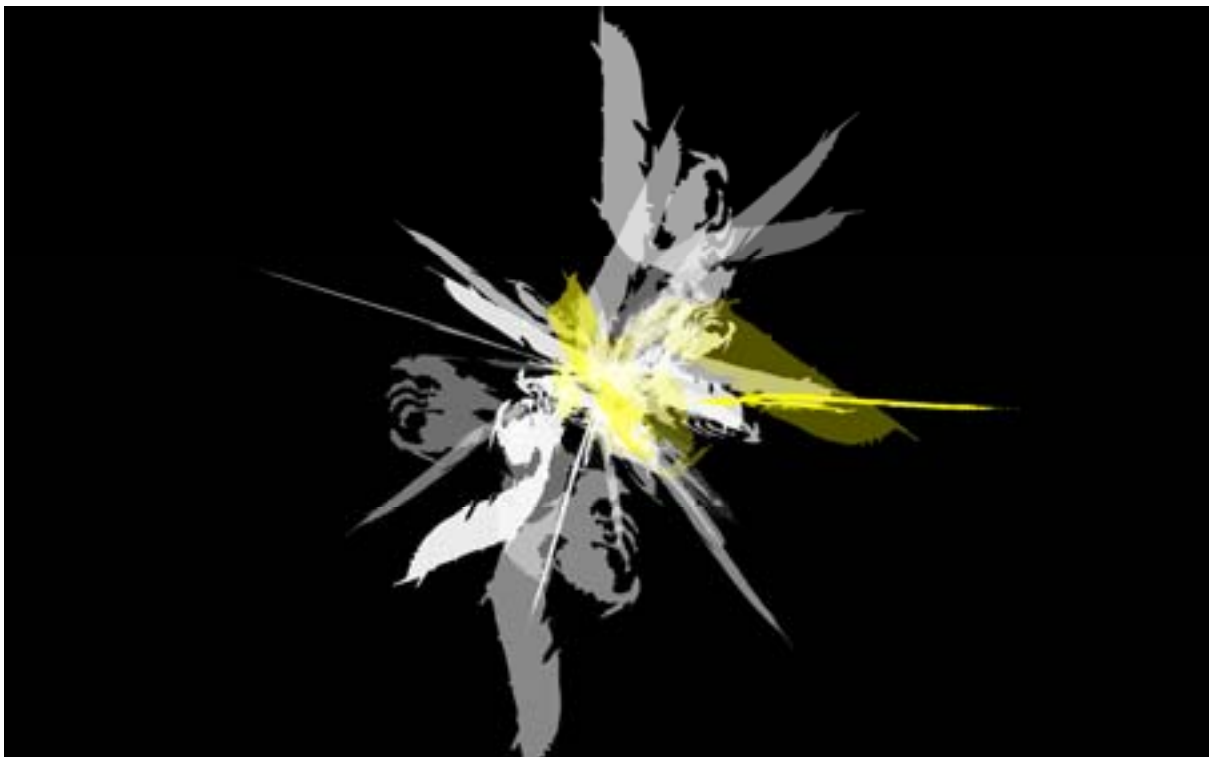Figure 79:  Re:generator Chroma 4

Figure 80:  Re:generator Chroma 5



Figure 81:  Re:generator Chroma 6

Figure 82:  Re:generator Chroma 7

# INTERCONNECTIONS

In the development of the bodies of work over the past 3 years, I've gained some strange insight into my creative process, some component fundamentals that are paramount to the work. Puzzle, pattern, and narrative construction, to name a few; modularity in design and emotional resonance with an audience are significant, too. On the surface there is a consistent exploration of our relationship with technology, but in truth, that is not really what its about. The real connection lies in the pursuit of something logically unbelievable and yet intuitively acceptable. Each of the projects seeks to bring tangible form to the impossibly complex by structuring it into a tangible, perceivable pattern. I conjure.

The reason I have been drawn to arts (visual, literal, and musical) and technology though out my life is because they both operate on the same paradigm and both demonstrate a kind of deeper magic in their proper execution. In both cases, there are secret mechanisms operating beneath what you see. It seems their very purpose to make you question what you are seeing, to look deeper, to see more in the work, and in your life. Vibrations, calculations, semantics, very few people can accurately describing what is actually happening that produces the unique experience that we ultimately perceive. Consider what you see on a computer screen. On a conceptual or a mechanically functional level, its so far removed from a what-you-see-is-what-you-get model of understanding and there are further difficulties if one were to assess the system of dependencies that are systemically involved at each of the levels of processing. At some point, our relationship with both advanced technology, and really any suitably

complex system, is in many ways defined by our perceptual need to mentally close on manageable wholes. These relationships require an almost immediate and reflexive suspension of disbelief, one that closely mirrors the function of an active human imagination. Believing that what you see your personal computer doing onscreen is in fact a real representation of the activities of that computational system is acceptance of a logical fiction.

I have always had a difficult time qualifying what I have been exploring over the course of the MFA program as academic research, but in the course of examining the themes, concepts, and works which have played a part in the preceding document, I wonder about that. Over the course of this graduate program I have ____ and though my contribution to academia may not answer any big questions, the body of work presented herein has certainly originated from the same desire to find meaning and purpose in the systems of the world. After all, aren't all of our sciences rooted in the pursuit of a unified theoretical paradigm for us to believe in? If my work manages to lead even one person to look a little deeper into the part they play in the larger systems, or to wonder about all the little things that have to work together to make things operate in their world, I will consider my research endeavors worthwhile; and if not, well, you've got to admit, those robots are pretty cool.

# LIST OF REFERENCES

Sun Tzu and Cleary, Thomas, ed. The Art of War. Boston & London: Shambhala, 1991.