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Washington University in St. Louis Graduate School of Art



Filter Feeding



A thesis presented to the Sam Fox School of Design and Visual Arts of Washington University in St. Louis in partial fulfillment of the requirements for the degree of Master of Fine Arts

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<u>Abstract</u>

This paper is an investigation of the mechanics of evolutionary processes and its methods. These investigations are representative of both a world view and a methodology of artistic production. I consider a central consideration of my current work to be the interaction of distinct components and the new experience that these interactions produce when pondered by a viewer. Evolution and the development of life is driven ever forward by the interactions between organisms, both as groups and individuals. By grouping these relationships into three categories: parasitism, predation, and symbiosis, I aim to provide a lens through which to consider both the imagery and material choices in my work.

Introduction

"True art is but the anti-type of nature; the embodiment of discovered beauty in utility." ---James A. Garfield

This paper will primarily be a reflection on the current developmental stage of humanity's evolutionary path: our present. I will discuss relationships that occur between organisms within the natural systems found on earth. Parasitism, predation, and symbiosis are all driving forces of evolution, but what are their methods, how do they play out? I am choosing to discuss these specific ecological perspectives because I find them fascinating and relevant to our own human condition. Relationships are prominent and reoccurring themes in my current work. Life is all of the exchanges between all of its inhabitants. Given enough time, these exchanges of competition, collaboration, or manipulation have the potential to form any conceivable form.

Through discussing some specific traits I observe about other organisms in nature, culture, or both, I can describe my choices, conceptually and visually, and help translate how I am thinking about and reacting to both the artwork and the environment I am living in. I'm pondering what we categorize as human; as an artist, this is a great interest and concern because art is a purely human invention. A central concern of this paper is to discuss humanity's relationship to organisms found in nature, the on-going process of evolution, and to the visual process of looking at art and things in general.

I will dissect the concept of evolution into three distinct driving forces: parasitism, predation, and symbiosis. I am choosing these categories because I feel they encompass the range of relationships between organisms. This concept of exchange between parts and the

creation of relationships between those parts is a central investigation of my work. Scenarios are created that allow for exchange between the multiple components or characters of a piece. Ultimately, this exchange only occurs through the seeing of the viewer, so they are a facilitator and participant. There is undoubtedly some exchange between a viewer and a work of art, reactions elicited from its individual qualities. I like to experiment with methods of drawing the attention of the viewer to different areas or individual components of a larger scenario. The exchange can be driven by a narrative, but I usually prefer it to be lose, ambiguous, and non-linear.



Breaking News: Murder Machine -Oil on canvas, oil on paper mounted on panel with acrylic and glazed ceramic-2015

I will discuss what I call the three relational forces: parasitism, predation, and symbiosis not from the perspective of a scientist but of an artist. They are about relationships between individual components and this is a concern of my work. I draw aesthetic inspiration from the extreme visual diversity of living organisms and how evolution has honed them to their purpose.

Many purposes involve a mission of visual attraction; I elaborate on the use of these attractors and how they inform my material choices. They serve to illustrate ways I think about making my work and manipulating the gaze of the viewer. Central concerns of surface qualities and texture exist in my own practice. What can a surface evoke? I especially like the idea of a living surface or a surface that is a colony or thin skin of cells. This can produce an uncanny effect that can be unsettling, but will definitely elicit a response.

In some ways, Art can be seen as an expression of our higher cognitive capabilities and a declaration of our position on our evolutionary path. In other ways, art is at its core, anti-nature. Nature thrives on utility and I think that a chief quality of much art is its negation of use or utility. However, in my own work, through material choice, I do reference back to the human tool as an anthropocentric driving force that we have created. Technology, like art, is a purely human construct that continues to shape our development as a species.

Evolution

Evolution is the driving force of biologic life on earth and every other planet where life exists. It is the mechanism that allows the idiosyncratic interactions between creatures I find so compelling to take place. My work also prompts the viewer to consider humanity's place within the ongoing and infinitely adapting systems of life, which we are participants of. As humans, we have developed technology that allows us to accelerate, augment, or entirely break away from our classical model of evolution (through various relationships between organisms). Evolution is often thought of as survival of the fittest in a reductive way: who can kill or mate the most. However, Charles Darwin talked about cooperative animal relationships as well. The subtlety of parasites can be very unsettling but incredibly complex.

Evolution is the force of life and it is basically the result of every interaction between each organism on Earth. These relationships interest me and become some of the subject matter in my work because each method is so varied in its approaches and strategies. It allows for limitless possibilities if simply given enough time. For our human senses and life spans, the shifting movements of evolution are difficult to see in motion, but the individual interactions can be seen and examined in great detail. This is why they are of such interest to me, the three types of interactions (parasitism, predation, and symbiosis) are the movement of evolution that is otherwise imperceptible.

Parasitism

There is no free lunch and everyone will eat you to get ahead. But this is just to feed their own, right? When does want turn into necessity? "It's human to want what we need, and it's human to desire what we don't need but find desirable. Sickness occurs when we desire what we need and what's desirable with equal intensity, suffering our lack of perfection as if we were suffering for lack of bread."¹ But this strange and shifting binary is not purely human. There is a species of fungus that infects an ant and nestles into its brain. It then changes what the ant wants. The ant no longer feels the urge of hunger, now it cares only for the sun. Completely enraptured by the sun's gross luminescence: worshiper, fanatic, the ant's desire is finally fulfilled. From there, the fungus grows and eventually splits open its host's thin forehead, projecting a tendril into the open air like an antennae pole. Better reception.



Drawings for ANNIHILATE : graphic novel collaboration with Brandon Daniels

The ultimate purpose of the fungus making the ant want sun is so that it will travel and situate itself in an open and vulnerable area, making it much easier for an over-head bird to spot it and then ingest it. This is necessary for the fungus to complete its life cycle and later be distributed through the feces of the bird. This is an example of parasitism, a process in nature that I find as interesting as I do morbid, and ripe with metaphorical implications concerning humanity. For instance, the emasculation of Freud's castration anxiety is not a far shot off from the paranoia evoked by the subtle tactics of some parasites. "Whether complete or not, host castration may be the ideal strategy of host exploitation: by attacking non-vital organs, castrators do not reduce the host life span, and they can obtain a high transmission rate without trading off longevity."² When does a want become a need? What factors determine our choices? Who is in control?

Some of these questions may be unanswerable, but they are thoughts that surface when I learn about or observe the myriad of relationships that exist all around us. Of course this

example is something observable at the ant scale, the spore scale, and then the human scale. Massive disparities in scale can mute our attention and awareness of these interactions, but they are continuous.

Predation

Parasitism exists alongside another shaping force in nature that gains through causing harm: predation. Even though it is often the goal of the parasite to keep the host alive in order to continue living inside of it or feeding off of it, as with the mind-controlled ant, sometimes the parasite ultimately leads to the death of another animal. However, there is a distinction between the two; while both involve harm or death, predation stands alone. "So far it has been defined only in negative terms; it is thought not to be parasitism, the other great process by which one organism harms another, nor filter feeding, carrion eating, or browsing. Accordingly, one could define predation as a process by which an animal spends some effort to locate a live prey and, in addition, spends another effort to mutilate or kill it."³

A lot of predation is also about seeing. This is evident through the orientation of eyes in an organism. Predators primarily have forward facing eyes, always pointed toward the stalked or fleeing prey. While the prey itself will have more side oriented eyes, allowing for maximum scanning range to detect its hunter. Lion VS water buffalo. Vision and sight is a vital sense that has helped shape every organism by delineating these predator prey relationships. However, it is only one sense, and some animals have senses that we can only imagine or simulate through our technology.

The act of predation in nature tears open the edges of perception and the capabilities of senses. This is because for predators, evolutionarily speaking, to kill is to live and the killing

cannot happen without the finding. "Every known sensory modality seems to be employed by predators to recognize their prey; recently elasmobranchs were found to detect the biogenic electric field of prey hidden in the sand. . ."⁴ Indeed, predators employ more senses than we as humans have access to. They feel electric shivers, see radiant heat, and taste others in the air.

Symbiosis

This leads to the third great shaping force of evolution: symbiosis. This is mutual gain from both sides of an exchange, two backs are scratched. This allows plants to form relationships between birds and insects to pollinate them. Slowly through the eons, the species have found that working with each other is ultimately more beneficial than not.

Sometimes, symbiotic relationships are not a benefit but a necessity. Some species require another specific species to complete their life cycles and repopulate. This is why when one endangered species is killed, it usually doesn't just mean that one. It's more of a chain reaction. I need you to need me. So which came first? Most likely the question doesn't even make sense because of that fact one could not originate without the other. Yet they are both here now. Imagine the incredible slowness of this interweaving interaction. I wonder about the initial mix and its catalyst, and I try to imagine what strange processes played out.

So, parasitism, predation, and symbiosis exist as the three main categories of relationships between organisms. Although these over-arching concepts are interesting, to me the real fascination comes from the details and idiosyncrasies of these oftentimes incredibly complex relationships. In other words, I am drawn to seeing the methods of these forces, their techniques and toolboxes in order to employ them in my own work.

Colonies/Hive Minds

A becoming-animal always involves a pack . . . a multiplicity. We sorcerers have always known that.⁵

---Deleuze and Guattari

Life is a complex set of relationships between separate entities, but where do we make the distinction between entities? We generally categorize ourselves as humans, but microbiology has revealed the ecosystems of our own bodies to us. A human is made up of a lot of human cells, but also a host of microbes and bacteria. A recent study conducted by Ron Milo and Ron Sender at the Weizmann Institute of Science in Rehovot, Isreal, and Shai Fuchs at the Hospital for Sick Children in Toronto, Canada showed on average, "they" match "us" about one to one; ". . .the number of bacteria in our bodies is actually of the same order as the number of human cells. Indeed, the numbers are similar enough that each defecation event may flip the ratio to favor human cells over bacteria"⁶

Equal parts human and other. The shape and structure of the vast microbial network matches "our own"; is it attached to us or us to it? Either way, when we are at our healthiest, the relationship between these two participants must be classified as symbiotic. They assist with the processes of our organs and in return get a cozy place to live. Constantly voyaging meat vehicles. Due to extreme scale and organ differences, we do not have direct communication with our microbial symbiotes, but within many other relational systems, this is not the case.

The result: compounded thinking power, hive mind, super-organism. Two great Entomologists, Myrmecologists (studiers of ants) specifically, Bert Hölldobler and Edward Osborne Wilson discuss their concept of collective thought in a "superorganism" and the boggling efficiency of this hive mind. "... the colony is a family. In most species it is so tightly

organized as to justify the expression 'superorganism.' If you look at a colony from a yard or two away, and let the image go slightly out of focus, the bodies of the individual ants seem to melt into one oversized, diffuse organism."⁷ The heart of this superorganism is the queen, only she can produce the eggs that perpetuate the colony. This theory of superorganism is so compelling and valid to me because you can essentially rip out this heart. What happens when the queen dies? "It would seem logical for the workers to raise another queen to replace her. . . But this is not the usual course of action taken by workers when bereft of their mother; they do not follow the biologist's simple logic. In most cases the colony fails to produce a royal successor, and it declines until the last forlorn worker dies."⁸ This individual component is integral to the overall life of the colony; the distinction between parts starts to waiver as groups of individuals become more like organs.

Many parts comprising a whole that generates an effect on the viewer, beyond the sum of its parts, gestalt. With the sponge and water drawings and some of the ceramic and plastic sculptures, I am able to focus on the actual objects more and what their individual qualities evoke. I can group certain qualities together into the objects, and pair them with other objects to create my own kind of biomes or interactions. Like the normally hard and rigid form of a brick turning into a blue gelatinous, softer form, that is yet able to be walked on and traversed. This is paired with the visual oddity of a surface made up of dry compressed sponges, that is then reconstituted with water which then transforms it into the more recognizable common-place cellulose sponge. Like layers of skin cells or a slice of cell walls of a plant, they create a kind of living surface that is highly visually stimulating.





The material of compressed sponges I use are synthetic but, especially once inflated, call to mind the natural counterpart of a living sea sponge. Natural inspiration fed through generations of humans and adopted as a tool. A synthetic and geometric doppelganger, remade for the ergonomic convenience of a human hand. They have the ability to be greatly altered in saturation, texture, and form with only water. Potentially, they could be further altered in color by simply adding a dye to the water they are exposed to, but I find that the purely textural sensations are heightened in the absence of a color shift. Also, I want the raised and more recognizably sponge areas to chiefly evoke the actual water and its addition to the dehydrated and flat surface. The dye would exist as a third material itself, and complicate what I see as a simple and poetic gesture. I see the work with sponges and bricks as systems themselves, a system between distinct parts like: bricks, sand, sponges, and colored panel.

Attractors

Attractors are employed in nature by many creatures. Attractors are sometimes used to acquire a mate and pass genes on. Sex is an excellent motivator. Organisms often go to great lengths to ensure their attractors are enough to prevent them from dying alone. Attractors are also employed by the predator against its prey, luring them in with something the target finds appealing and unthreatening. But first let's focus on attraction for the purpose of mating. I will separate them into three different groups: acquired flare, granted weapons, and innovated subterfuge.

First off, acquired flare: while there is an entire range of attractors that cater to the various senses, in relation to my own work, I focus mainly on visual stimulants. In nature, this is often something eye catching or desirable that arrests the eye. Drawing attention to specific areas of their body through variations in texture, shape, form, or color. These types of attractors can be highly nuanced and range from a crab adorning itself with colorful sponges and bits of coral to a bird that painstakingly engineers an entire nest embellished with materials purely sought after for their aesthetic appeal. Highly tactile surfaces containing a haptic⁹ charge are often used in this process. "If some of these structures are duplicated, enlarged, and transposed to other parts of the body, if some are shaped into weapons, helmets, or ornaments, and even if the members of one sex borrow the other sex's most potent attractors-these things all constitute visual foretastes of tactile stimulation."¹⁰ In my own work, I employ the use of highly haptic surfaces to draw the gaze of the eye and cause it to linger here or there, allowing the viewer to consider larger more ambiguous forms made up of smaller recognizable pieces.

The second type is not a creation of the individual but a result of genes. These are the weapons. They are not used for self-defense against predators but rather inner-species jousting,

competition. Horns, spurs, antlers, pincers: all highly weaponized portions of the body, all highly male. Blood-sport, effort, show. Everyone wants to be wanted. Sexy violence. Through this competition, the weak are separated from the strong, and the strong allowed to pass their genes on because strength is desirable.



Reindeer Games -oil and silicone on panel -2015

In *Reindeer Games*, I create an ambiguous scenario: a tightly cropped composition of a giant blue stag of questionable vitality. The antlers normally exist as the stag's granted weapons of competition, however here I have softened and rounded them, subverting their utility and

purpose. This blurring of purpose is enhanced by a chimerical quality of the creature; the antlers can double as wings of a butterfly or moth, using its patterns for the direct opposite of combat: camouflage. Cerebral bands of silicone serve as a framing mechanism; they act as cinema stripes, implying an investigation, recording, or watching of this animal.

Although granted weapons and physical displays are "strong" attractors, physically weaker or smaller individuals often employ a third type of attractor based in intelligence: innovated subterfuge. The sea dwelling cuddle fish offers a particularly cunning example of this. Cuddle fish are highly intelligent social animals that largely communicate through colored patterns and textures of their skin, which they are able to rapidly modulate. During mating season, the strongest of the males will corral females, guarding them vigilantly against any other weaker competition. So, the smaller males then adopt the coloration and body language that a female would currently have in this situation. The large gatekeepers, assume they have merely attracted another female, and allow the other male under their canopy of tentacles. The imposter wins over the female right under the unknowing other. These genes of intelligence and problem solving are then transferred on to the next generation, where the games will play out again and again.

In other cases, attractors are appropriated from another species entirely in order to employ it as a helping member. This is seen in flowers that mimic a specific species of wasp, fly or other winged pollinator. When the approaching insect touches what it thought to be a member of its own species, it is implanted with the pollen of the flower. Some species of orchids have evolved scents that mimic the sex pheromones, otherwise known as aphrodisiacs, of insects. "Orchids release a perfume that mimics a fertile female insect, luring in male insects. Overcome by the sexy female scent, the males are duped into attempting to mate with the flower. During

their futile attempts at copulation, they pick up a gobbet of pollen, so that when they visit another flower they will pollinate it."¹¹ And what do the male insects get in exchange for their effort? Absolutely nothing. This in particular seems to rest somewhere between symbiosis and parasitism.

The other type of attractor is that of a predatorily motivated farce. Something so engaging the flight drive is over-written by the wants those attractors trigger, usually either food or sex. It's a lure that evolution has crafted through uncountable instances of the prey choosing the most specifically appealing lures. Organs become specific to the corresponding prey, giving form to its desires.

Attractors//Art

Attractors in nature are intensely visual, this is tied to their purpose. Patterns, colors, and textures have all been honed by the blade of evolution to facilitate the function of being looked at. When making a painting or sculpture, I like to use varied and tactile surfaces and think about their effect on the viewer. Where do they direct the eye, what is evoked by the surface when the eye gets there, how long does it linger? In many of my paintings, I also pair these pure areas of color or texture with imagery. This allows me to start making connections, however abstract, between the two.

In my work, these concepts of biology or biological systems either appear through imagery or object. I like to experiment with what can be discovered in the space between painting and sculpture. I think of it mainly in terms of a rendered image being virtual, a screen, but a sculptural object is actual, existing in real space. The image is a captured moment, but the brain like bands of silicone or amoebas of poured paint sit outside the virtual image. These

surfaces fuse to the skin of the painting and inhabit our own time and space. My painted images will often display actual situations occurring as they might in nature among recognizable organisms, but also sometimes depict created creatures. This can be a combination of a moose with butterfly wings as antlers or a blue bull being eaten by a pack or amorphous lions. Displays of power or predation, symbiosis VS parasitism, and attraction or allure appear and reappear as themes in my imagery.



Buffalo Blood --oil on paper and silicone on panel -2015

I will also combine painted imagery with actual texture or material, like bands of silicone wrapping around an image, or pours of pure paint that wrinkle into a skin that sits on top of the surface of the image. I like that these materials can seem like outside entities of the scene occurring in the rendered image, yet still possess a level of interaction with it. I experiment with the degree and method of these interactions between image and material, sometimes producing a noticeable "change" in the image where its inhabitants are "aware" of this new intruder. Or at

times, I treat the outside textures as more formal elements. By creating frames or view ports they become containers for the image.

A lot of art is about seeing. This is true of the viewing of finished works of art but also essential to the actual production of art. When working, there are times when my senses seem so immersed in my act of creating that time seems to slip forward, unregistered by organs too saturated and preoccupied with texture, color, surface, image, and form.

Usually, an artist creates work with the intention of eventually showing it to others. Initially, art carries the intent of the artist, but is then changed by the individual perception of each viewer and the context that culture places it into, both historically and art historically. The idea of attractors vying for attention becomes very interesting when applied to the gallery setting. Which works scream out for attention: are they vibrant in form, controversial in subject matter? Which works draw attention specifically because they do not scream: they are restrained, cool and subdued? Some works call out to the body and some to the mind.

Living Surface

Many of the aesthetic choices I make serve to facilitate the idea of a living surface. This concept can easily be applied to different areas of a work of art: the skin of a painting or the smooth edge of a body chiseled in marble. I call attention to these barriers, like in *Buffalo Blood*, but also like to complicate them by having materials "outside" the image's skin interacting with the created scene. The surface of the entire piece now exists as a microcosm of relationships. I think the works with sponges also evoke the idea of a living surface through their repetition and form, resembling maybe a slice of cell wall structures of a plant viewed under a microscope.

Their metaphorical relation to a living sea sponge and coral reefs in general also represent this concept.

Being a pervasive quality of much of my work, my interest in this idea of a living surface has inevitably led to me searching for interesting examples of this already existing in the contemporary art world. I like it when an artist can find a really inventive or uncanny method of doing this; one who does this particularly well is French artist Pierre Huyghe. One focus of Huyghe's work is a meditation of not only deep time but also our methods of categorizing information about our past and existence. Some of his work is site specific, mining the museum or gallery for components to create with. In *Timekeeper*, this is done by sanding through the many layers of paint in one area of the wall, revealing concentric circles. "Like a geological cross-section, *Timekeeper* uncovers and shows the successive layers left behind by previous actions (wall paintings) on the walls of the Wiener Secession. Just as the rings of a tree tell its history, *Timekeeper* is a caption that tells the story of its location. It allows the work of different artists to coexist."¹² Cataloguing time in this way, he is able to simultaneously create a kind of retrospective and group exhibition.

For me, his most interesting work is that which employs actual living creatures or plants in cooperation with found objects or created environments that shift through time. The effect is an artwork that changes without the direct intervention of the artist or the viewer. In a way, these living surfaces and systems allow the piece to never really be finished, it remains in a state of flux and change. *La Deraison* is a sculpture that is part of a larger installation *In Border Deep*. Here, Huyghe has taken a fragmented stone statue, a human created human, and connects it to a heating system that raises its temperature to the exact temperature of a healthy human body: 98.6 degrees Fahrenheit. From there, pools of water among its crevices assist in growing a moss over

the surface of the sculpture. The artificially heated body is a metaphorical living surface that allows for the growth of a real one.



Pierre Huyghe's: La Deraison, 2014

Another artist that I have found whose work calls to my mind a living surface is Mona Hatoum. Some of her work deals with the relationship of the body to her sculptures and their implied use. "Many of Hatoum's early pieces situate the body as the locus of a network of concerns- political, feminist, and linguistic- thereby eliciting a highly visceral response."¹³ Absent of a body but clearly an object designed to have some sort of relationship with it, the viewer can easily insert themselves into this role of participation. I am attracted to the sense of touch that her pieces evoke, without ever having to touch them. She uses materials like cold metal and sharp nails or knives, surfaces whose contact with bare skin would be very noticeable.



Mona Hatoum: Socle du monde (Base of the world) 1992-93

One particular piece that relates to my interest in a living surface is *Socle du Monde (base of the World)*. Through the title and dimensions of the piece, she relates it to the sculpture of the same name by Piero Manzoni, where he created a metal cube with the words (Base of the World) written upside down on it, effectively creating a pedestal for the entire "sculpture" of the earth. However here, Hatoum responds to the more subtle qualities of the earth: rather than its scale, its electro-magnetism. Inside the metal box are electro magnets that create intertwining magnetic fields. These fields are the only thing adhering copious amounts of pure black iron filings to the outside of the surface. What is metal is aesthetically converted to soft undulating bands, ever so slowly and minutely shifting across the flat of the sculpture. Determined purely by the interaction of the forces of magnetism, these surfaces are not made up of actual living material as with Pierre Huyghe, but still possesses organic and fluid qualities.

Human Materials

The materials that I use in the work with sponges or bricks all have strong human connotations through their utilitarian use. They reveal this through their ergonomic form: made for the size and shape of the human hand. Sponges have a natural living counterpart in the deep oceans, but the yellow cleaning sponge as we have come to recognize it is obviously synthetic; it is geometrically cut and easy to squeeze. Likewise, the bricks, while originating from the purely natural material of clay, have been transformed into human hand sized building blocks. These are laid out on the floor to create a very human cobblestone-like walking surface with sand, often employed and created for utilitarian purposes by humans, but also found naturally.

This humanization of material acts as a commentary of what Carl Sagan called the anthropocentric principle. This is a mental quirk that may have developed from ancient drives that benefitted us a species, watching out for number one, sticking together as humans and keeping our humanity as an elevated and special quality. However, as our intelligence increased and our awareness of our environment extended, this mindset has again and again served only to blind humanity to the reality of existence.

When our gods were made, they were made in our human image. Furthermore, many such as the Greek gods, shared many of the same drives, ambitions, and hubris that are embedded within humanity. This anthropomorphizing of deities made sense to the majority of humanity while we thought of ourselves as the unique creations of human-like gods in a universe made around and for us. Galileo was imprisoned for his probing into the mechanics of the universe, daring to question the established canon of the earth being at the center of the universe and every other celestial body orbiting around our home of primary importance and stature.

In a current project, I have been thinking more about creating a space and treating my work in a more installation-based mindset. By creating a floor of soft looking turquoise brinks that the viewers will step onto, I will create an experience of dislocation. You are in a new place now, with unfamiliar architecture and unknown surroundings. On Earth, we can understand or at least somewhat relate to most environments, but I am creating an environment of purely imagined forms. Within it I can create entities that are not easily recognizable as purely flora, fauna, body, or building. On the wall is a 12 ft tall monolith of sponges. Many of these elements rest somewhere between architectural knowns: floors, walls, monoliths and more biological entities: bodies, colonies, networks. I create a space where the viewer is unsure of the biome and its hierarchy and their own place within it among its unknown inhabitants. This place may not even be terrestrial, so how can you gauge if you are a predator or unknowing prey? This unimaginable other can seem threatening or daunting, but as we hopefully progress as a species into the universe, I hope it is with an attitude of exploration and acceptance for anything previously unknown.

This piece is about relationships between parts, I minimized the number and types of materials used in order to highlight this. The floor of bricks helps create the imagined space and the panels of sponges facilitate the presence of a larger than human scale entity within close proximity. It is important to me that there is enough space for multiple people to occupy or traverse it simultaneously. With enough people occupying the space, small groups may form, bunches of colonies. Are these colonies packs or are they herds? It is left to each viewer to contemplate the relationship between these human colonies and the other central element of this piece: the sponge monolith.



digital mock-up for Filter Feeding

I want the answer to these questions of relations to remain ambiguous and ultimately be determined by each viewer. It is interesting to think which of the three relational forces, symbiosis, predation, or parasitism could be applied to the relationship between the viewer and the sponge superorganism. I call attention to this through the piece's title: *Filter Feeding*, implying some sort of exchange or gathering or feeding from that perhaps can't be seen. Predator or parasite or neither? This unsettling but intriguing possibility is reinforced by the form of the symbol itself, bringing to mind thoughts out mitosis, infinity, propagation.

Aesthetically it shows the alien nature of what could be produced by or inhabited by humanity through infinite evolution. These forms are not clearly biological or mechanical, but maybe that is how our spaces will be in the far future. Our buildings could be grown, living structures that provide energy for themselves. We would inhabit them as the microbes inhabit each of us. Eventually time will produce life so unimaginable to us today; we can only wonder what relationships take place between its parts. And we have to wonder if humans are part of the show anymore.

These investigations of unknown regions always leads me back to thinking of humans and human creations. The methods to explore places on a galactic scale may seem so alien to our current sensibilities. This piece is a possible scenario made of materials designed by the human derived from a natural source: sponges, bricks, and sand. Through using these human centered materials, the piece becomes a sort of human filter, all of its individual components become molded to the qualities of humans. As a piece of art, I expect only humans to see and contemplate it, and to also inhabit and participate with it, so these components may be somewhat recognizable or familiar to them. However, my goal is to combine and treat these recognizable components in such a way as to create a very unfamiliar experience and environment for the viewer.

Both sponges and bricks allow me to create a grid. The sponges establish a sort of fractured grid, imperfect in its wavering geometry, but still a matrix, a subdued and structured backdrop. Against this grid, the swelling expansion of the hydrated sponges transgresses the repeated pattern and greatly differentiates itself from the adjoining flat surfaces. So, this raised area then becomes a separate entity from the surrounding surface and becomes another member of the set of relations between distinct parts of the entire piece.

The sponges are a manufactured good that is developed or derived from a natural counterpart; I find this compelling, and an important conceptual underpinning for relating my work to living systems found in nature. Art is a mark left by humanity, an act of creation, and our own creations will outlast us all. I have sponges that I choose to group; one sponge becomes

a colony. A rigid panel provides the same function as a rigid coral reef surface: a strong structure on which soft forms are anchored. They are invigorated and grown by water, existing as a colony of individuals. When hydrated, the sponges literally pull themselves away from the surface of the panel, as if emerging from a 2D image, into our 3D space and time.

The unending process of evolution will continue to shape life and its idiosyncrasies until there is no more life to interact with itself. To me. it represents the potential for unlimited change and possibilities. Through parasitism, predation, and symbiosis we humans happen to find ourselves at the tip of the evolutionary spear of this planet, our first home. Through culture, we attempt to separate ourselves from nature, and it is an important distinction, a celebration of our humanity. However, the driving forces of interaction will always be with us, reshaping themselves again and again through every epoch and every organism.

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² Robert Poulin, *Evolutionary Ecology of Parasites* (London, New York: Chapman & Hall, 1998), 76.

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⁴ Kalmijn, A. J.: The electric sense of sharks and rays. J. Exptl. Biol. 55, 371-383 (1971).

⁵ Deleuze and Guattari, A Thousand Plateaus, p.239

⁶ Sender, R., Fuchs, S. & Milo, R. Preprint on bioRxiv http://dx.doi.org/10.1101/036103 (2015).

⁷ Bert Hölldobler and Edward O. Wilson, *Journey to the Ants* (London: The Belknap Press of Harvard, 1994), 37. ⁸ Ibid, 38

⁹ Def: characterized by a predilection for touch. (Merriam-Webster)

¹⁰ George L. Hersey, *The Evolution of Allure*. (London, Cambridge: The MIT Press, 1996), 6.

¹¹Lesley Ogden. *Three tricks Orchids use to lure pollinating insects*. BBC, Feb 2015.

http://www.bbc.com/earth/story/20150202-three-ways-orchids-trick-insects.

¹² Carolyn Christov-Bakargiev, *Pierre Huyghe* (Italy: Skira, 2004), 184.

¹³ Alix Ohlin, *Home and Away: The Strange Surrealism of Mona Hatoum* (Art Papers Magazine/Jun2002, Vol. 26 Issue 3, 2002), 16.