Collision Nine*

Art Interactive Gallery

130 Bishop Allen Drive, Cambridge MA

Curated by jackbackrack, Dan Paluska, and Brian Knep

Exhibit: Jan 27/28 Feb 4/5, 11/12, 2006 12-6pm
Opening Reception: Friday, Jan 27, 2006, 6-9pm

Introduction

The Collision Collective and Art Interactive present *Collision Nine*, an experimental exploration of art and technology. Collision Nine, the ninth event in the Collision series, will showcase art from artists from MIT and beyond who use new technologies in their work. Eighteen pieces of art are presented by burak arikan, ernesto arroyo, lenardo bonanni, joe dahmen, philip decamp, ammon embry-pelrine, mike everett, chris fitch, amber fridjimenez, rob gonsalves, john hart, jackbackrack, heather knight, brian knoth, nick knouf, georgina lewis, christine liu, elizabeth marley, dan roe, gemma shusterman, erica von schilgen, william tremblay, and ryan wartena.

C9 has the largest number of pieces of recent Collisions and represents a wide range of techniques and concepts!

In general, Collisions are a showcase of envelope-pushing artwork in an interactive workshop/laboratory format. The artwork often involves never before tried technologies, concepts and installation approaches. It is an opportunity for Collision colluders to experiment and show new ideas and techniques and to discuss their work with and gather feedback from the public. Artists will be available during the opening and weekends to speak with the public.

Exhibits

Tantalus Mackerel (2005)

Chris Fitch

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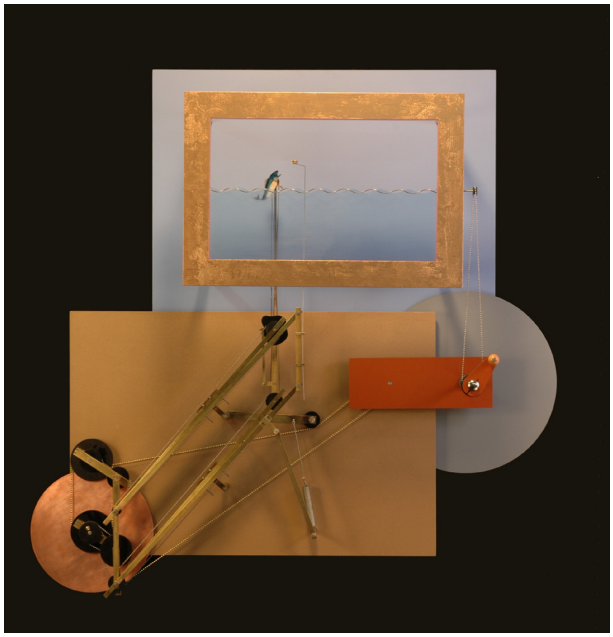

Brass, fiberboard, lithotin cans, garolite XX, misc. hardware.
Approx. 54in X 54in

The story of Tantalus has been, since its Greek origins, a consistently applicable metaphor for the human condition. Tantalus angered the gods by trying to feed them the flesh of his own son, passed off as ambrosia. For this, he was chained to the bottom of a lake that reached to his chin. With luscious grapes drooping from vines above his nose, starving Tantalus was unable to enjoy either food or drink, as they were pulled away whenever he reached.

I wont go on about how I think this relates to American culture today, which suffers from a kind of self-inflicted hunger from unrealistic expectations. Nor will I attempt to make any connection between the story of Tantalus and our current global problem with mercury levels in deep sea fish, and how we are our own gods and are punished by our own actions when we poison our own food supply.

Let me just say, instead, that this piece is about a frustrated fish trying to catch a bug.

*http://www.collisioncollective.org

Epicycles (2005)

Mike Everett
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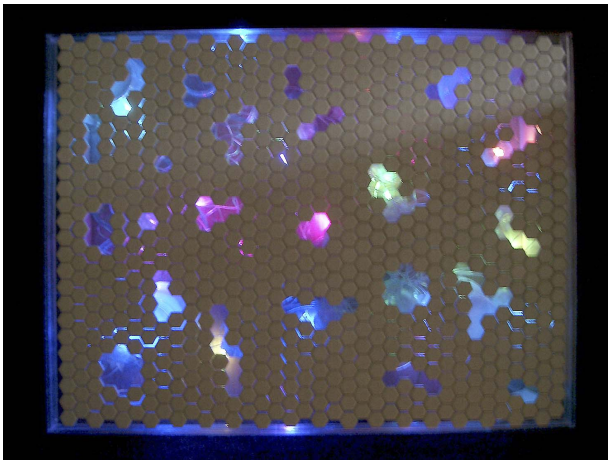

Mixed media (tiles, plexiglass, LEDs, mechanical timers)
30x18x5

Epicycles consists of many layered systems: the visual system of the hexagonal tiles themselves, the implied system of the simplified shapes created by removing some of the tiles, the system of the mechanical timers controlling and resetting the color cycles of the lights and the patterns of the lights behind the tiles. Each one of these systems has their own agency. The tiles work with geometry. The patterns within the tiles invoke language. The agency of the mechanical timers is steeped in a mechanical universe characteristic of the early industrial age. The circuitry within the lights tempts the viewer to attribute a more anthropomorphized character and meaning to their behavior. A confluences of potential meanings that can be filtered, sorted, reordered, meditated-on and/or simply experienced.

Follow Dada (2005)

Burak Arikan
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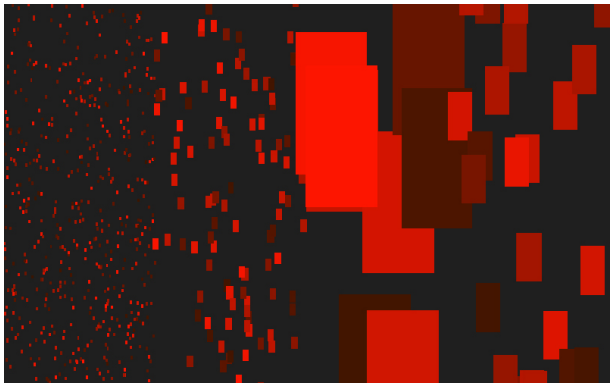

hardware-software hybrid, projection
90x36 inches and 90x90 inches projections

This work is an interactive installation that investigates the relationship between information density, physical distance, and intuitive human acts. It is composed of two software projections on the wall and floor, and a sensor system that captures the proximity of the viewers. The visual information projected on the wall is responsive to the proximity of the viewer. As the viewer gets closer, the rectangular body of the information gets divided into smaller pieces and becomes more detailed. When the viewer moves back, the information gets less detailed, becomes large and visible from afar.

Pigeons (2005)

Joe Dahmen
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birdseed, suit, video
approx 3'x5'

Pigeons are often considered a public nuisance because they thrive where humans live in greatest density. Although they are often ignored by other inhabitants of the city, the behavior of pigeons can be read as a reflection

ofand commentary onthe urban environment. The piece seeks to reverse the common treatment of pigeons, acknowledging their status as residents of the city while attempting to learn about the urban environment from them. Pigeons investigates the relationship of birds to the urban environment through video captured while wearing a special suit covered in birdseed. Exchanges on Boston Common with pigeons, which were recorded by surveillance cameras installed on the suit and an external observer, form the basis of a video documenting the piece.

Pigeons was developed in the Interrogative Design Workshop at the Center for Advanced Visual Studies (CAVS), MIT.

Pulling Pears from the Pond (2006)

erica vonSchilgen
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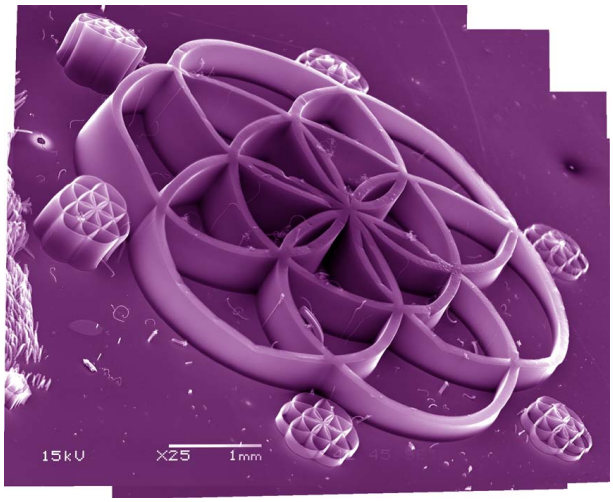
mixed media
3'x 2.5'

This mechanical collage is part of a series of works that incorporate found images and movement, creating an environment where the viewer can step into a place of childlike discovery. When the viewer triggers a push button the motor starts and a crank shaft turns, which makes each character in the collage move. A story is told in the movement.

Growing Architecture: Initial Experiments (2005)

Growing Architecture Collective
Earth
ryanwartena@yahoo.com



carbon nanotubes, laser print, wood, acrylic, LEDs
2 @ 2' x 2', box 6"x6"x6"

Architecture = Collective (plus) Nature (plus) Technology

By continuous technological intervention, the scripting of space can be implemented by the machine, an architecture will grow in accord with algorithm, environment, materials and natural forces resulting in bottom-up assembly of systems of both static and dynamic geometries.

The application illustrated here follows the crystalline method, where carbon nanotubes follow a surface pattern of a catalyst film of Fe/Al2O3 where hydrocarbon (Ethylene, C2H4) decomposition takes place in an atmosphere also containing hydrogen and argon at 750 C. The combination of these tuned environmental conditions, reactants and catalysts and the process of energy minimization through crystallization results in the carbon nanotube structures presented. The first image is a test pattern of rectangular columns of different aspect ratios and the second picture consists of structures known as the seed of life and is the basis of the sacred geometric set (from which all crystal structures, the reproduction process, music theory and many other informational systems may be derived).

The methods and materials are only of the essence of constructing Growing Architecture. The other is the collective effort. We choose to put our heads together and collectively manifest. These samples and pictures, these boxes and frames, these words and ideas have all been a collective effort.

We are all more than we are named and so are you. In conjunction with architects, computer scientists, urban planners, chemical engineers, builders, material scientists, designers, mechanical engineers, and the artists in all of us, we are bringing to the world an accessible art form, and its natures ancient way to build and live.

Perseverate (2006)

William Tremblay

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http://www.williamtremblay.com

Aluminum, steel, fabric, plastic model kit, computer

8 * 6 * 3 ’

Perseveration is a repetitive response or thought after the cessation of the original stimulus. It is the consequence of unwavering resolve... Following verification on dot blots, 68 clones were confirmed with clear differences in expression between workers and soldiers. Workers have three developmental potentials: status quo molts in which they remain as workers; differentiation into the single-star presoldier stage (followed immediately by forced molting into the soldier stage); or differentiation into Six-Sigma, eyeless third-form reproductives that assume identical functions as second-form reproductives. Differentiation of the soldier caste is associated with a tremendous increase in body mass and musculature; particularly in the head, where a large muscle mass is required to drive the enlarged mandibles. We identified four externally implanted directive transcripts with high expression in soldiers: 1.) I will always place the mission first. 2.) I will never accept defeat. 3.) I will never quit. 4.) I will never leave a fallen comrade. The presence of logos, URLs or other information identifying private companies or other nonfederal entities does not constitute an endorsement by the Department of the Army or the Department of Defense. Raw materials such as iron can also be extracted from the ground.

There is nothing at all behind the curtain, except what’s on TV.

Social Fabric (2006)

jackbackrack

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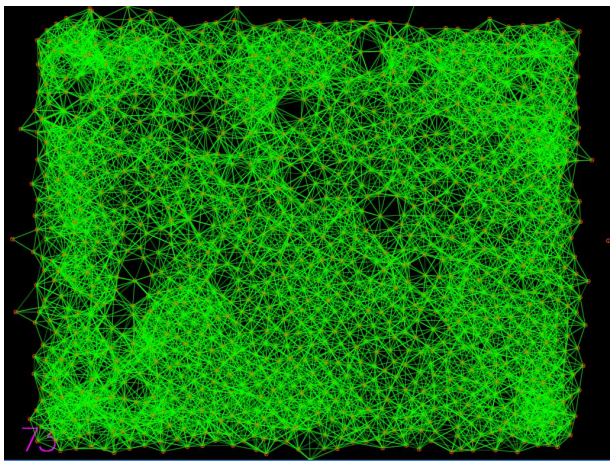
www.jbot.org



3d animation on computer, two lcd panels, one box 16x36x4in

A living skin created out of engineered emergence of a couple thousand mobile robots illustrating the tension between the individual and the community. The tissue fibers are formed by the radio connectivity of each robot. The robots attempt to live harmoniously but rebellious individuals create tears in the social fabric.

Social Fabric is written in a new programming language, called Proto, for describing group behaviors and engineering emergent phenomena. In this language behaviors can be mixed and in this artwork, individual and community oriented behaviors are expressed and combined.

The Proto language is joint work with Jake Beal. Thanks to Fran Trainor for help building the display case.

Out in the woods there's the damnedest things (2006)

Georgina Lewis
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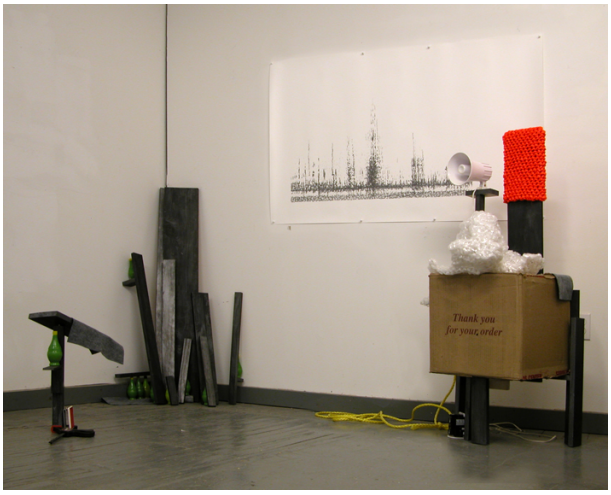

paper, wood, plastic, motion sensor, speaker
4'x6'x6' aproximately (dimensions variable)

I spent the month of November 2005 living in a haunted property in the woods of New York state. November is deer hunting season and I had to wear a bright orange vest when I went outside to prevent being shot. The silence of the forest was punctuated by the sound of gunshots and the experience was a little intimidating. The drawing is of a spectrographic analysis of tree limbs creaking in the wind; I am particularly interested in the preservation of sonic artifacts, and their subsequent display as objects. One day I inadvertantly recorded the sound of a gun being fired in the distance; that sound plays through the speaker and is activated by the presence of a viewer. The human intrusion causes the disruption, and the residents are suitably scared.

Misty Dawn (2005)

Amber FridJimenez, Philip DeCamp
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video installation
8 x 8 x 8 feet

Misty Dawn superimposes the past on the present using video projection in conjunction with realtime image segmentation. A video camera records action taking place within its field of vision. The time-delayed foreground is layered on the current video to produce a doubling effect.

The piece creates an uneasy spatial relationship in which viewers interact with versions of themselves seven seconds in the past. Through the multiplication of bodies, we might lose track of who is who, or which is the double. The Brechtian interruption of chronology poses questons about identity and memory.

Hemithea Aestivaria (2006)

Dan Roe
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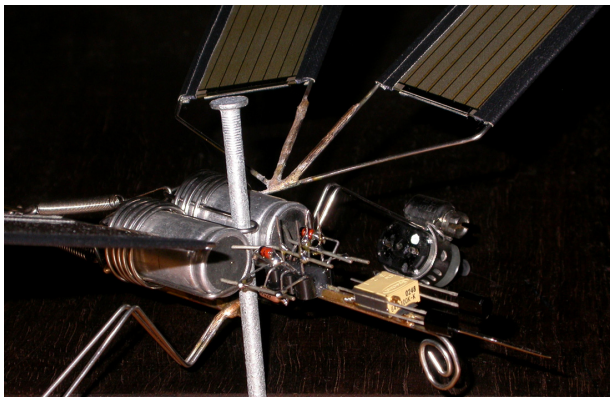

Steel, wood, solar engine
plaque: 18

Hemithea aestivaria, or the common emerald moth, nailed to a specimen plaque for our viewing convenience.

viol·res·sōn (2006)

Nick Knouf

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Violin, speakers, sensors, custom electronics, tape, sound
3'x3'x15'

The sounds of the space, inside and outside, top and bottom, mixed with the resonance of the violin creates an everchanging soundscape. Inside the instrument are four suspended speakers, their inputs threaded through the f-holes of the violin. Sounds from contact mics throughout the space are mixed with a microphone on the inside of the instrument. These sounds, combined with a repeated composition on endless tape, enter the instrument through the f-holes and take on the resonance properties of the violin. Suspended in space, the violin assumes a shadowy presence with instrument as torso and wires as ribs. The entire sculpture intends to meld a traditional instrument (and the undercurrents that it entails) with restrained technological additions to create an aural object for listening or performance.

PixelPusher (2005)

Rob Gonsalves

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http://www.deepdevices.com

Video Camera, Computer with Custom Software, Video Projection
3' x 6' x 3'

PixelPusher is an interactive video installation that continuously solves a real-time pixel puzzle. The user can change the size and speed of the pixels (puzzle pieces) by adjusting two sliders on a command console. The viewers image is captured by a web camera connected to a hidden CPU, processed, and displayed on a rear-projection screen. The system continuously processes the video stream by quantizing the image to the specified pixel size. Each group of (4x4) pixels forms a puzzle to be solved concurrently. The video projector, rotated 90 for a portrait style, is positioned under the floor. The projection screen is mounted on a steel frame. The web camera is mounted over the screen. The sliders on the command console are connected to an OOPIC controller to be read continuously by the CPU.

toast 'n' roast (2006)

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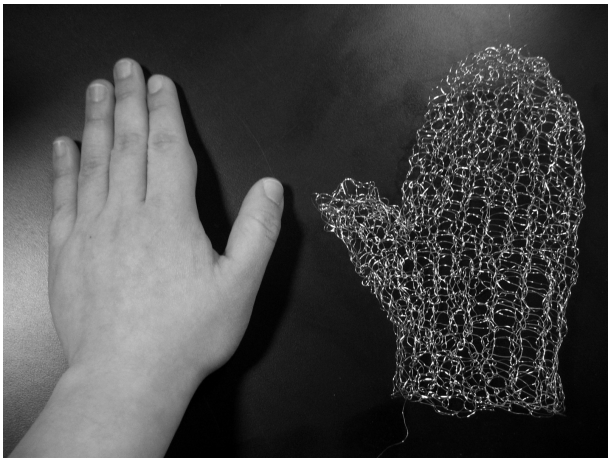

28-gauge nichrome
sized to fit a small pair of adult hands

toast 'n' roast are mittens, a familiar and comforting winter accessory, that are hand-knit with nichrome heating wire. as powered sculptures, they emit palpable, painful heat. toast 'n' roast raise several implications, including: the difficulties of technological clothing (physical or psychological discomfort of electronic textiles on our bodies); the embodied human warmth of handcrafted objects; and the technological complication of these 'functional objects' (they offer warmth) that are very much dysfunctional for their apparent purpose.

Perseguimiento de Zanahorias (2006)

Heather Knight
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web.mit.edu/rehtaeh/www

electronics, mini picket fences, and paper mache.
3'x4'x2'

In this piece, a three wheeled bunny chases a IR-LED equipped carrot on an audience-controlled fishing rod. The resulting behavior explores goals and motivation in the context of our everyday lives and picket fences.

gurgle (2005)

Ernesto Arroyo, Leonardo Bonanni
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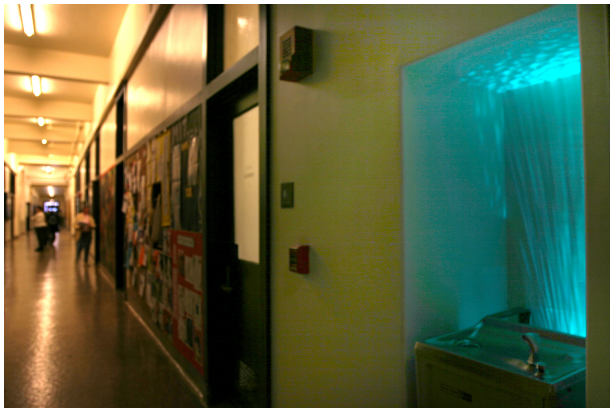

sound light
24x24x75

Water is our most precious resource, a substance with vast implications for health and ecology; but our interaction with water is often grimy, hurried, neglected. gurgle glorifies our contact with water, transforming the act of washing or drinking into a multimedia experience. By overlaying the bathroom alcove with a shimmering blue light and the sound of a babbling brook, gurgle completes the bathroom experience and encourages visitors to partake in a casual moment of meditation. gurgle elevates an everyday experience through interactivity, and seeks to extend the space of the gallery into the bathroom and everyday life.

gurgle is sponsored in part by a grant from the MIT Council for the Arts.

The Frequency Series: Sidereal Day #2 (2006)

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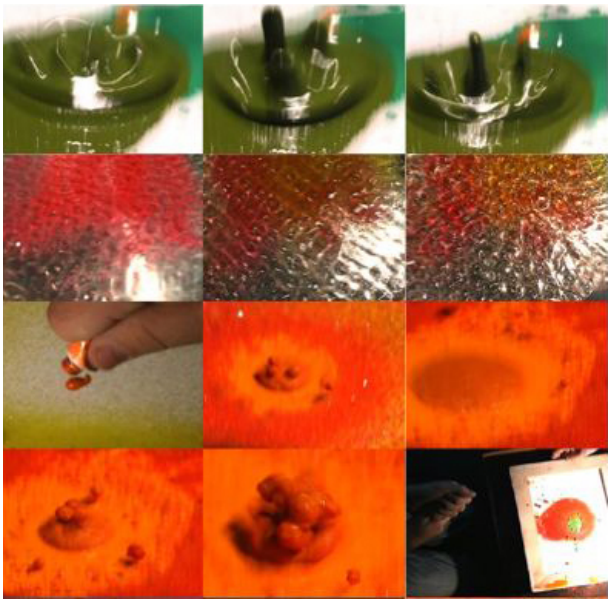

sound mass, colored substances, custom software, digital video
variable

Cymatics, the study of wave phenomena, is a science pioneered by Swiss medical doctor and natural scientist, Hans Jenny (1904 -1972). For 14 years he conducted experiments animating inert powders, pastes, and liquids into life-like, flowing forms, which mirrored patterns found throughout nature, art and architecture. All of these patterns were created using simple sine wave vibrations (pure tones) within the audible range. What you saw was a physical representation of vibration. This piece references these interesting experiments, as a specially designed sound mass excites colored matter. The work is an exploration of vibration and frequencys relation to form. In addition, the sound mass is composed of frequencies correlating to the earths true daily rotation rate (the sidereal day). The resultant sound influenced imagery is intriguing not only in depicting the inherent responsiveness of matter to sound, but also for the suggestion that we too are part and parcel of this same vibrational matrix.

Special thanks to the Lafrenaye family!

Endangered Senses: Super Elephant (2005)

Gemma Shusterman
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http://web.media.mit.edu/ gemma/

fabric, nylon rod, electronics
4'x2'x5'

This project was inspired by the human tendency to equate our perceptions to those of the rest of the natural world and evaluate other systems solely in terms of human experience. We form these perceptions through the lens by which we experience the world; our senses. Although there are many species by whom the world is experienced quite differently, whether it be hearing, seeing, even smelling, we frame these definitions by the boundaries of our own bodies. We simplify and codify the natural world to make it fit neatly into our definition of reality, creating a anthropocentric position from which we witness the world. For example, we may think of the zoo as

a quiet space, but to an elephant who can hear frequencies far below the range we can perceive, environmental factors such as trains and traffic can create an surrounding that would be difficult for us to imagine.

The project, Endangered Senses, consists of a costume that allows people to experience a sense of endangered animals that is not possessed by humans. The elephant-inspired costume investigates the pachyderms' ability to detect infrasonic and seismic vibrations. The wearable has long telescoping sleeves which conceal the arms and hands and connect to the floor. Thus, the human is asked to sacrifice defining human characteristics (bipedal, with opposable thumbs) in order to experience a supplemental sense. The sensor is an accelerometer which picks up vibrations in the range of 5-20 hz, extending below humanly detectable limits. The signal is then sent to an fm synthesizer (written in c and contained on an avr microcontroller), processed to make it audible and broadcast via FM transmitter or amplified speakers to create a shared sensory experience between wearer and audience.

In many situations wearable technology creates a more isolating experience for the wearer. In creating a performance garment, I hope to question the isolationist tendencies common in modern technologic designs. I hope to do this not only by creating an experience that includes senses that we do not possess, but also to include an audience in the experience. Ultimately, the goal of the project is to create a community experience by allowing empathetic bond with the animals around us. Photograph courtesy of Kate Kunath