

exhibition catalog

ARTIFICIAL SELECTION

April 24 - June 26, 2010

Curated by Rhiannon Mercer, 516 ARTS



516 Central Avenue SW Downtown Albuquerque, New Mexico t. 505-242-1445 • open Tue - Sat, 12-5pm www.516arts.org

We Are Made to Morph

by Rhiannon Mercer

Machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert.

> – Donna Haraway, A Cyborg Manifesto from Simians, Cyborgs, and Women: The Reinvention of Nature

t is the year 2010. By all accounts a pretty futuristic-sounding year when you see it written down or speak it out loud. "Two thousand ten" rolls off the tongue like an automated voice recording, so direct and simple there's no mistaking what you hear. If you subscribe to the internationally accepted Gregorian calendar, 2010 may not be that big a number within the context of the hundreds of thousands of years of human existence, but what makes 2010 so remarkable is that the Future,¹ as described by science fiction author Arthur C. Clarke, is upon us. Well, not *exactly* as described. But the mere fact that the years in this decade correlate as well as they do with Clarke's novels, both *2001: A Space Odyssey* and *2010: Odyssey Two* (published in 1968 and 1982 respectively)² leaves one to ponder the fantastic advances that have become a part of this present-day Future—a future once imagined so elaborately by Clarke, other writers and many artists of generations past.

Having been born in an antiquated-by-today's-technological-standards decade in the last century (1977 to be exact), I come from a generation that was born in the midst of some of the most influential imagery our collective culture has produced—films like *Star Wars, Alien, Blade Runner, RoboCop* and *The Terminator*, along with stories by Frank Herbert and Stanley Kubrick. Despite the technological obsolescence of the 1970s, that era can proudly claim the birth of modern computing technology, the exponential growth of the environmental movement and many significant advances in the biological sciences, including genetics and evolutionary thought. I, like most members of my generation, entered an American culture saturated with amazing and absurd possibilities that in the intervening years, have become even more surreal. These days, the boundaries between fiction and reality are truly blurring.

Movies, books and art can set your mind on fire with some of the most impossible visionary possibilities, but when it comes to the actual science, technology and social reality of the current year 2010, much of the early and mid-20th century forecasting—of a world hyper-machined, computercentric, often dystopic with the natural environment in crisis—is arguably exactly the kind of world in which we live. And the wonders and warnings of



coexisting with advanced technologies are also reiterated by those dealing in the 'facts' not the 'fiction'—generally speaking, the scientists, economists, researchers and other various experts.

Of course, being fearful of the Future, even the one we dream of (or inhabit) isn't exactly a new phenomenon. In years past, when most of us were embracing the "techno-beast" to collect food, fashion weapons, build that round object called a wheel or rocket to the moon, some of us were uncertain about the changes these technologies would bring. What our perennial ambivalence indicates about the technologies we've created then and since is fairly simple; like it or not, technology in all its forms comes with both an upside *and* a downside. It also tells us that the Future, no matter when it's envisioned, whether it's seen as good or bad, is both inevitable and seemingly indifferent to our efforts to divert or manipulate it.

The exhibition *Artificial Selection* was conceived around the ever-presence of change as it describes the notion of human evolution in light of our many advancements. Inspired by the famous words of Charles Darwin, "natural selection" describes the process by which the environment plays a critical role in the development of certain variations in traits appearing in

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an organism which would improve its survival or reproductive ability and in turn ensure successful propagation of the species. By contrast, artificial selection is the intentional manipulation of given factors—through breeding and experimentation—to yield or combine preferred traits. It also recognizes our interconnectivity to non-human biological entities (i.e. plants, animals, micro-organisms) within a functioning global ecosystem, and illustrates the effect of the human hand in this evolutionary process.

Several of the artists in the exhibition embrace the idea of maximizing artificial selection in the Darwinian sense, and willingly expose the manipulation inherent in creating new and unique organisms for today's convenienceoriented consumer. Photographer **Krista Birnbaum** takes a virtual approach to arranging complex combinations of otherwise incompatible regions of plant life to yield a landscape subject to her individual whim and desire. Her lush and aesthetically pleasing images echo the already rich history of grafting, crossbreeding and agricultural transgenics, while recalling the heroic but failed attempts to condense ecosystems in the various Biosphere projects. **Sarah Hearn** tackles the construction of new organisms that possess both biological characteristics and elemental properties, using well-established systems of scientific classification for the source of their creation. Once made, she seeks to understand these new, semi-fictional creatures by scientifically scrutinizing their behavior from the moment of genesis through their adaptation to their natural habitat.

Robert Dohrmann takes the science a step further by offering an entire industry based on consumer choice. *Davison Grant Genetics*, a simulated biotech company, pitches undeniably attractive options for an enhanced and improved life complete with the ability to manufacture only the "best" traits in individuals. It's an alarming re-envisioning of the history of eugenics illuminated by the light of modern science and genetic engineering. **Stephanie Metz** uses felted wool to construct creatures which highlight

the way animals are manipulated for human purposes. They are "overbred" in their domestication to become grotesque distortions of natural life, stimulating in the viewer mixed reactions of revulsion and sympathy and calling for a reevaluation of our revision of nature. Sculptor **Travis J.**



Farnsworth's creatures attempt to turn the tables on the species responsible for their evolutionary derailment and perversion. Mythologizing the animals which were once human discards of science (*Dolly Attempt #647*) or used as talismans to guard against human superstitions (*The Creator*), Farnsworth bestows a heroism upon these survivors, suggesting a tortured but happy ending in their narratives. As a metaphor for a subject of scientific inquiry and experimentation, **Laurie Hogin** employs the imagery of guinea pigs to represent 100 of the nation's most prescribed drugs, suggesting that human beings have become the guinea pigs within our pharmaceutically-saturated culture. Another of nature's creatures is at the heart of digital media artist **Andrea Polli**'s project *The Fly's Eye*. Inspired by processes of vision and the complex structure and function of the eye of this tiny insect, the multimedia installation generates a live, animated documentation of objects in both space and time.

For painter **Steve Budington**, the complicated and unpredictable nature of human evolution is the starting point for exploring a future world



where the breakdown of "human." "culture" and "environment" are no longer separable, but tangled together in a dance of hyperbolic symbiosis and competition, with the struggle for survival remaining at the core and caught in perpetual evolutionary dynamics. Heidi Taillefer's paintings point to the notion that in our current century, we have become chimeras hybrids made of machine and biological elements. Heavy in mythology and symbolism, her paintings reflect the "mythic time"³ in which we live, retelling old tales and creating new ones through the lens of modern scientific

possibilities. Such possibilities open the door for **Christine Chin** to bring the idea of utilitarian genetic engineering into the home, or more precisely, the kitchen. By unabashedly exposing the distinct parts of species and machine hybridization, her *Vegetable Human Hybrids* and *Sentient Kitchen* products suggest that convergences between technology and biology can both be familiar (perhaps too familiar?) and yield enhanced function. Improved living is the icing on the cake when the cake is all about survival, for who wouldn't want to be surviving *better* than previous generations? With *Made to Order*, **Gil Scullion** overlays ideas of home construction with those of genetic manipulation, each a means towards achieving satisfaction as well as control regarding the success of our future generations, both fundamentally recognizable instincts for our long-term survival.

When making choices regarding survival, how do we navigate the complicated ethics surrounding what we *can* do as opposed to what we *should* do when it comes to practices in biotechnology? **Adrienne Outlaw**'s *Fecund Series* installation of biomorphic forms combined with natural and synthetic materials, encourages viewers to consider the consequences, both good and bad, of the most challenging biotech issues facing us today. One advantage that medical science offers is the ability to function with synthetic parts. Not only do we have prosthetics, but operable artificial hearts, blood and skin. In her sculptures *Cross Sections* and *Amnioforms*, **Alison Petty Ragguette** explores the fusion of the natural and synthetic at a visceral



level. Exquisitely crafted, these works suggest a harmonious relationship of once disparate parts adapted to function as a whole.

Finding the Future of the past, or future-that-was-and-yet-may-still-be, inspires photographer **Luke Shaw** to build upon a larger 'cult of technology' as illustrated in popular 1970s cartoons. The nostalgic robots in Shaw's world occupy multiple dimensions, remaining light and innocent enough for a children's cartoon, while hinting at darker issues and underlying fears of technology in the hands of evildoers, both real and imagined. **John Stephenson** also revisits the past by employing vintage car parts to

Christine Chin, Milk Jug (detail), from the Sentient Kitchen series, 2010, digital photograph, 22×30 inches

Hybrids pervade our mythologies and religions and continue to play an influential role in the way we perceive our capabilities as a creative species.

create bio-mechanical Combines whose physical manifestations draw on human, aquatic, avian and insect references. Embedded in the burgeoning mythology surrounding them is a scientific scrutiny of their evolutionary development, the promise of potential, and the uncertainty of their ultimate future in a world ruled by humans. The fusion of nature and technology is gracefully adapted in the sculptures by **Brad Story**. Exploring the function of flight with the creation of new aerodynamic or hydrodynamic forms, the resulting works blend avian, insect, maritime and aircraft elements, blurring the distinction between machine and living being, and suggesting fluid autonomy of action by the form itself, or just as deceptively, precision control by a well-versed operator. We trust the operator to control the machine. Yet what if that desired machine was an entire army? Adrianne Wortzel attempts an experiment in control inspired by military and defense efforts to ultimately replace soldiers with robots on the battlefield. Using robotic toys, she and collaborators hack their programs to reconfigure their objectives. No longer designed to giggle and ask silly questions, these robots have become a well-regulated militia. Simon Mehalek examines high functioning robots of a less aggressive nature but with no less sense of duty. Having implemented designs for units that will one day be realized, Mehalek designs robotic furniture that re-imagines the familiar.

Colored by the cinematic and literary influences of my upbringing, I have carried with me an intense fascination with the unpredictable nature of our evolutionary course. The extensive history of selective breeding and cross-breeding of plants and animals for domestication (for purposes such as food, commodity, work and enjoyment) is only the beginning of what science and technology are enabling humans to create in the 21st century. No longer shrugged off as the stuff of science fiction or fantasy, genetic engineering and advances in technology have presented the real possibilities of super-humans, designer babies, sentient robots and animal-human-vegetable-machine hybrids. Humans have long embraced the notion of hybridization—of creating or becoming something new that transcends limitations and becomes enhanced, improved or made more powerful.



Hybrids also pervade our mythologies and religions and continue to play an influential role in the way we perceive our capabilities as a creative species.

The Transhumanist movement embraces human enhancement technologies in pursuit of the elimination of those aspects of the human condition that can put a thunderstorm in your otherwise sunny day: disability, disease, aging and yes, even involuntary death (which is not so off the mark from the benefits to humanity offered by mainstream medical science). The debate over whether nature and machine are two opposing forces or can truly co-exist continues to rage. With our increasing alienation from the natural world, not to mention alienation from each other caused by the excessive technologies in our day-to-day lives, this conflict is unmistakably a marker of "growing pains" as humanity moves into a new evolutionary phase. And while the arts have the ability to put these issues into perspective and inspire our imaginations, the very real technological capabilities that we possess (and test) are at the center of global moral and ethical debates. Whether pursuing power, progress or pure experiment, do we fully understand the consequences of artificial selection?

Rhiannon Mercer is the Assistant Director at 516 ARTS and a working artist. She is also a semi-retired wildland firefighter and search and rescue volunteer, and continues to work backcountry trail projects in Colorado. These experiences, along with growing up in high profile nuclear areas in the West, have fed her imagination. She holds an M.F.A. in Painting and Drawing from the University of New Mexico.

^{1.} Future is capitalized throughout to emphasize its novelty in referring to a time when imagined things may come to pass.

^{2. 2001:} A Space Odyssey (the novel) by Arthur C. Clarke was based in part on short stories written in 1948.

^{3.} From A Cyborg Manifesto, Donna Haraway, from Simians, Cyborgs and Women: The Reinvention of Nature. New York: Routledge, 1991.

Krista Birnbaum

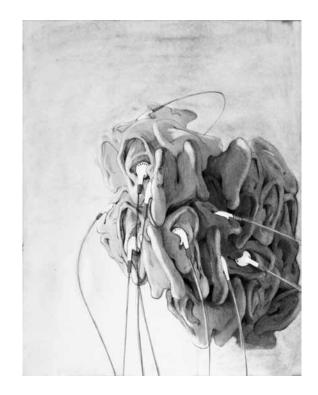
Youngstown, Ohio



"My current series, *Emerging*, appropriates photographs from print materials, ranging from garden catalogs to fashion magazines. These images are digitally arranged and manipulated to create dramatically lit scenes of lush vegetation. The resulting images initially look photographic, but reveal the many steps of re-imaging upon closer inspection. The dot pattern from the printed material is visible within close range. Some evidence of the collage process is left intact as well. My work is motivated by a desire to understand my own relationship with nature: simultaneous desires to both be unified with and in control of nature. The *Emerging* series allows me to manipulate ecosystems of plants, combining incompatible regions of plant life (tropical, deciduous, and arid) to fit my desires."

Steve Budington

Burlington, Vermont



"What would happen if the human could evolve at the rate of cultural novelty? How would it compensate? What would it become?... Drawing on sources ranging from early anatomical studies, neuroscience, environmental issues and current developments in medical technologies and outdoor gear, my paintings present hyperbolical but familiar situations. Consumed by the project of 'making sense,' the anatomically altered figures in my paintings become imagined sites of cultural evolution where a body and an environment compete, as much as they collaborate, for survival."

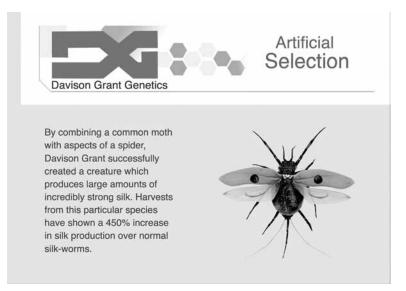
Christine Chin

Geneva, New York

"The Vegetable Human Hybrids explore the genetic technology that allows us to transfer genes between species... In the familiar context of the kitchen and the dining table, these unusual vegetables bring concerns about the technology of gene transfer to the home. These photographs encourage the viewer to consider their produce choices with renewed perspective. *Sentient Kitchen* examines the convergence between technology and biology. As the machines that assist our lives become smarter and more architecturally complex, they borrow increasingly from the biological realm... While it is the nature of the human ego to cast suspicion on a challenge to human intellect, *Sentient Kitchen* products explore the benefits of smarter, more sensitive solutions to our daily dining needs."

Robert Dohrmann

Norman, Oklahoma



At Davison Grant Genetics we have assembled a team of the most brilliant scientists in their fields dedicated to eliminating the unsightly and harmful imperfections in our lives. Within the very code of life, we are hard at work wiping out mankind's frailties and cosmetic flaws and replacing them with the highest level of physical qualities. We are also dedicated to establishing a new world order through animal, insect and food enhancement. In the near future, you will be able to pick and chose the way you and your child look, feel and live!

"This work is a simulated biotech company I created using primarily remediate sources found on the Internet. It is an investigation of the possible reverberations of the Human Genome Project. The history of eugenics, which was the study or belief of improving the 'qualities' of the human species at the beginning of the 20th century, played a role in informing the work."

Travis J. Farnsworth

Albuquerque, New Mexico



"My art is inspired by those around me, including the animal kingdom. My overt compassion and sensitivity for the vulnerable puts me in a position of protector and advocate. Through my work I am in many ways in a constant state of discovery of my own sense of humanity. I strive to express the lack of human accountability and present the viewer with an intriguing experience. Although the message behind the work is serious, I find it necessary to deal with the subject in a humorous manner. I see my images as exquisite perversions of nature, and it is within this realm that I find comfort." Sarah Hearn

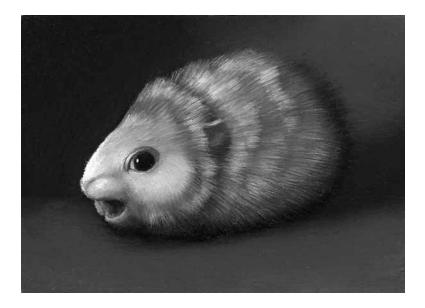
Rochester, New York



"An Unnatural History explores the uncomfortable periphery of what it means to be real and imagined through a record of biological marine life and phenomena. Much like scientists tinkering with natural systems, I am tinkering with two existing systems of scientific classification (the Linnaean Taxonomy and the Periodic Table of Elements) to construct new forms of life. Each organism in my catalog possesses biological characteristics and elemental properties from the periodic table. Many of the creatures are real marine organisms that embody both characteristics, and many are constructs of my imagination."

Laurie Hogin

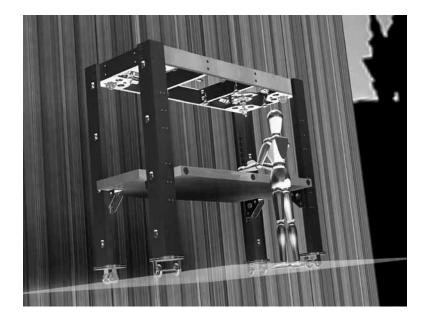
Mahomet, Illinois



"What Ails Us: The 100 Most-Prescribed Pharmaceuticals is a Modernistinspired grid of 100 tiny guinea pig paintings. Each pill-shaped creature sports the drug's brand colors, used to identify the pills or to market them to consumers and physicians. It is notable that the vast majority of these drugs are used to treat problems commonly associated with the excesses of American culture and political conditions: obesity, type II diabetes, depression, heart disease, insomnia and erectile dysfunction. The allegory suggests that our desires make us the guinea pigs in late capital's experiment."

Simon Mehalek

Santa Fe/Albuquerque, New Mexico



"Many people think of robots as anthropomorphic forms. But the word 'robot' comes from the Czech word meaning 'the ability to do work.' As the man/machine interface is drastically changing and we evolve as a species, there are more and more ethical questions to consider. In my work in this exhibition, I am attempting to convey potential avenues that robotics can take to make the world a better place, penetrating every day life with functional work such as robotic furniture and automobile controls. This work offers a small survey of the field, referencing how robots, like fine art, are born of the imagination."

Stephanie Metz

San José, California

"My 'overbred' creatures are a series of animals that bear the imagined results of domestication pushed to absurdity. The attributes that make them appealing, useful, marketable and handy for human use are short-sighted and human-centric. They are both strange and familiar, and arouse amusement, sympathy and disgust. It is not impossible to imagine that they may soon come to be, through breeding and bioengineering. Bioengineering (which is simply domestication using new technology), is not just something that goes on in isolation in a lab; it is also a set of values we continually weigh in on as a society. The choices we make in our everyday lives (such as clothing, food and living spaces) create the demand that shapes the biological world. The life forms we support are testimony to our judgments, goals and desires. My work aims to remind people of the human role, for better or worse, in modern evolution."

Adrienne Outlaw

Nashville, Tennessee



"I am interested in the ethical issues created by biotechnology. Is it right to artificially sustain those in persistent vegetative conditions? Is it moral to abort a fetus testing positive for an abnormality? What are the implications of using non-human cells to treat diseases? Are we smart to take advantage of what science and medicine offers or are we playing God? To explore these ideas in the studio, I manipulate and assemble natural materials with manmade products. I work with scientists to select movies showing the latest advancements in biophysics and I make videos of intimate maternal scenes. I place the works in anthropomorphic specimen cases so that they can be seen but not touched. Some pieces are fun, elegant and beautiful; others are marred by the recombination process. Viewers become participants when they peer inside a piece and see their reflection."

Hive from the Fecund Series installation, 2005, plastic, honey, wax, sinew, cicada shells, mirror, 5 x 5 x 4 inches

Andrea Polli

Albuquerque, New Mexico

"The Fly's Eye project creates an animated document of both space and time and draws inspiration from the structure, function and significance of the eye of the fly and other processes of vision. In The Fly's Eye, the history of a gallery space or film is built in layers of position and image."

Alison Petty Ragguette

Claremont, California



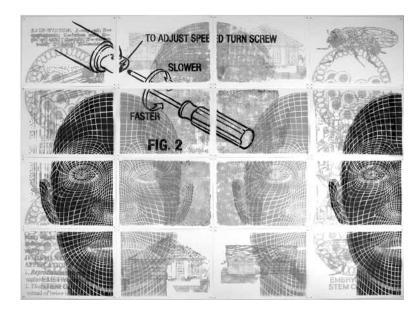
"Incorporating porcelain with recycled silicone rubber, Cross Sections are made in a highly engineered material that is intended for medical technology such as surgical tubes and human prosthetics. This synthesis of materials proposes a duality between the body and technology, as informed by biomechanics, the technology of life and the mechanical world of nature. Amnioforms are porcelain objects that are partially encapsulated in rubber, acting on the physical life of organisms and their potential for growth, decay and re-absorption. These objects appear to be emerging out of their embryonic existence, congealed midstream in their birthing process. Depicting this moment of metamorphosis, the forms become alive, as if reaching and gasping for their very first breath."

Gil Scullion

Middletown, Connecticut

Luke Shaw

Rochester, New York



"The *Made to Order* project is built upon 32 hand-cut, paper templates which are set onto similarly scaled sheets of paper and sprayed with acrylic paint. The stencils are layered and combined to produce larger images that stretch out over multiple sheets of paper. The images that make up the content of the templates deal with subjects of home construction and genetic manipulation in humans. The ambition to improve the physical condition of subsequent generations and the desire to build a dream home are both ways in which we try to create a better future for our children and ourselves. The urge to influence and control the future through our actions suggests the title of the project, *Made to Order.*"



"Metallic Memories of the Future is a tribute to the reckless, aluminumclad imagination of the scientifically minded evil genius, who by superior knowledge and ingenuity may manipulate the theories and principals of experimental science to strive for world domination... What today has become a mythology of technology, an imagined way of life synchronized with sentient robots and rocket boots, was then a part of a definite future. Science was without limits and everything was tangible in design. And in the evil genius business, the functionality of an evil invention is determined simply by appearance of functionality."

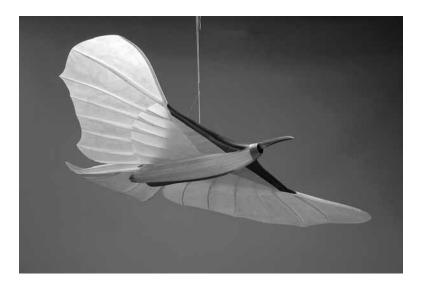
John Stephenson

Sugar Grove, North Carolina



"My works are *Combines* since they reconfigure disparate elements from the mechanical world. I reuse automobile light and electric parts from the 1930s to 1960s to create new forms. I combine biomorphic references (human, aquatic, avian, insect) with modernist era futuristic fantasies about the power of the machine, air and space exploration, and extraterrestrial life forms inspired by sci-fi movies. The detritus of a mechanized culture arises and recombines into independent, active and holistic forms, based on their inspired mimicry of the present life forms of earth. My work is both a nostalgic homage to the cult of the car and American industry of the past and a critique of these now antiquated objects representing an outdated Utopian dream of the future, driven by wanton use of hydrocarbon energy and electricity now affecting the economy and environment on a global scale." Brad Story

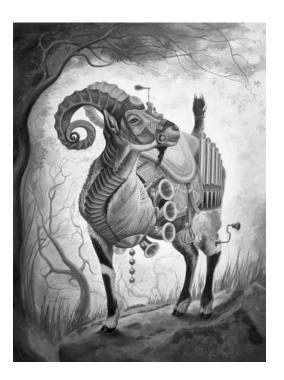
Essex, Massachusetts



"My sculpture explores flight and form, gliding along the boundaries between nature and technology. I integrate various avian, insect, plant, maritime and aircraft elements and spirits, delighting in the new aerodynamic or hydrodynamic forms. For me, a shape or gesture might arise from standing in the back yard and watching the red-tailed hawk twist his tail back and forth as he maneuvers and uses the wind, and daydreaming about what that tiny bit of aerodynamic truth might look like if it were changed a little, in structure, form, or scale."

Heidi Taillefer

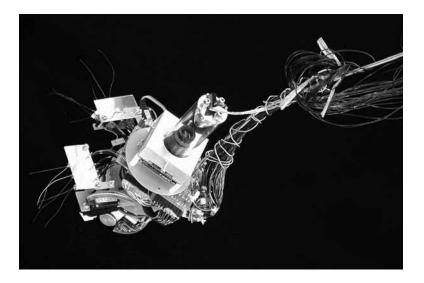
Montreal, Quebec



"I paint mostly about my philosophical observations and ideological concerns about the environment and the impact of technology. My work is a creative fusion of classical figurative painting, surrealism, contemporary realism and mythology combined with popular figurative traditions ranging from Victorian romanticism to science fiction. I paint subjects comprised of seemingly incongruous objects, forming a complex composite of various elements and adding a contemporary spin to classical icons."

Adrianne Wortzel

New York, New York



"Although the narrative for *archipelago.ch* remains emblematic of the themes of exploration and discovery of previously untouched territory, it also represents a future we, at this time, may not begin to fathom."¹

"A Well-Regulated Militia Bearing Arms... explores and uses sensor and wireless communication to create clusters of entities moving in exact synchronization in response to a call to arms. The toys consist of a quantity of 30+ Elmo TMXs stripped of their red furry coats performing military maneuvers emulating the rigid and postured fighting strategies of the French Army under Napoleon in the 19th century. These strategies were extremely idiosyncratic in Egypt where they were persistently performed without consideration of adaptation to either the desert environment or the fighting strategies of the enemy... The work is meant as a testimony to the tragic consequences of imperialism and the dangers, follies and sadness of a rationale for blind obedience that makes victims out of warriors."

1. From The Dynamic Darwinian Diorama: A Landlocked Archipelago Enhances Epistemology

archipelago.ch: St. Simmir Island, with Daniel Bisig & researchers Miriam Fend & Simon Bovet, AlLab, University of Zurich

ARTISTS' BIOGRAPHIES

Krista Birnbaum received her M.F.A. from Syracuse University in 2007 and her B.F.A. from Miami University in 1999. Her prints were recently included in the *Unlimited Edition* exhibit at the Arlington Arts Center in Virginia; the *KY7 Biennial* at the Lexington Art League in Kentucky and in a tribute to Nam Jun Paik at Gallery Korea in New York City. She has had solo exhibitions at the Buffalo Arts Studio in New York and ROY G BIV Gallery in Columbus, Ohio.

Steve Budington received his M.F.A. in Painting and Printmaking from the Yale School of Art and his B.F.A. in Painting from the University of Massachusetts, Amherst. His work has been exhibited nationally and internationally, including in New York, Austria and Brescia, Italy. He is the recipient of numerous awards, fellowships and residencies, including a New Frontiers Exploration Traveling Fellowship, and full fellowship residencies to Hotel Pupik, Austria and the Vermont Studio Center. He is currently Assistant Professor of Art at the University of Vermont.

Christine Chin has shown her work nationally and internationally at venues including the New York Hall of Science, Art Basel Miami and Canon Communication Space, Beijing. In 2006-2007 she was granted a Fulbright Fellowship to pursue her project *Alternative Alternative Energy* in China, and she was the 2008 recipient of the Garry B. Fritz Imagemaker Award from the Society for Photographic Education. She holds a B.A. from Princeton University, an M.A. in Visual Art from Purdue University, and an M.F.A. in Fine Art from the University of New Mexico. She is currently an Assistant Professor of Art at Hobart and William Smith Colleges, where she teaches studio art courses in photography and time-based digital media.

Robert Dohrmann received a B.A. in Art with an emphasis in Painting and an M.F.A. in Painting and Drawing from Central Washington University. He is currently an Assistant Professor of Art at the University of Oklahoma. In 2001, Dohrmann turned his research interests to digital media. His most recent body of works include experimental video shorts, a series of large scale propaganda banners relating to the nuclear age and post September 11 issues, audio mash-up's and nonlinear interactive web based media. He has had several solo exhibitions throughout the United States and has participated in many international film festivals.

Travis J. Farnsworth received a B.F.A. from the University of New Mexico and was awarded the 2009 Madonna Daniel Award through the Harwood Emerging Artist Fund. He works in the community with the developmentally disabled population and has founded The Exceptional Art Group, where he co-teaches with artist Kris Mills. He is currently working on a solo exhibition titled *Red Rabbit Exodus*.

Sarah Hearn earned a B.F.A. from the College of Santa Fe and is currently an M.F.A. candidate in Photography at the Rochester Institute of Technology. She has exhibited in multiple solo shows and group exhibitions in Oklahoma, New Mexico and New York. Her work fuses together disparate systems of science to fabricate new fictional relationships between these fields. She is currently exploring the inseparable relationship of myth and history, including photography, sculpture, drawing and other media documenting the lives and provenance of fictional species.

Laurie Hogin combines various tropes from the history of painting, natural history and scientific display, pornography, fashion photography and retail display with narrative allegory, often describing political, social, economic and emotional phenomena. Her work has been exhibited nationally and internationally for over 20 years, including at the Museum of Contemporary

Art, Chicago; the Addison Gallery of American Art, Andover, Massachusetts; Contemporary Art Center, New Orleans; Contemporary Arts Center, Cincinnati; State of Illinois Museums at Chicago and Springfield; Momenta Art, Brooklyn and many others.

Simon Mehalek is the resident rogue scientist at the Santa Fe Complex that specializes in robotics, computer science, chemistry and mathematics. He has completed several ground-breaking robotic projects at institutions such as Carnegie Mellon University, MIT, UNM, John Hopkins University and at his private research facility, Mehalek Laboratory.

Stephanie Metz creates innovative felted wool sculpture focusing on the relationship between humans and the natural world. Her work has been exhibited in San Francisco, New York and Stockholm, is held in numerous private collections, and has been included in national and international art and design magazines including *Craft Magazine, Zink, Object Magazine* (Australia), *Showroom* (Russia), *Gallery* (Ukraine), *Felt Matters* (UK), *Icon Magazine* (UK), *ArtWeek*, and countless blogs. She received her B.F.A. from the University of Oregon. Her work is represented by Hosfelt Gallery in San Francisco and New York.

Adrienne Outlaw is the recipient of numerous grants, awards and fellowships including from the Elizabeth Firestone Graham Foundation, Tennessee Arts Commission and the Virginia Center for Creative Arts. Her work is in public collections including the U.S. Embassy in Abuja, Nigeria, Cheekwood Museum of Art and the Nashville Public Library, and has been featured in many exhibitions and publications. Outlaw also writes, curates, lectures and runs programs for artists. She holds a B.F.A. from the School of the Art Institute of Chicago and an M.L.A.S. from Vanderbilt University.

Andrea Polli is a digital media artist, Associate Professor in Fine Arts and Engineering and Director of the Interdisciplinary Film and Digital Media Program and ARTS Lab at the University of New Mexico. Her work with science, technology and media has been presented widely in venues including the Whitney Museum of American Art Artport and The Field Museum of Natural History. It has been reviewed by the *Los Angeles Times, Art in America, Art News, NY Arts* and others. In 2007/2008, she spent seven weeks in Antarctica on a National Science Foundation funded residency.

Alison Petty Ragguette has developed an expansive approach to making sculptural objects in porcelain, glass, and rubber. She studied at Goldsmiths' College, University of London, received a B.F.A. from Concordia University, Montreal, and an M.F.A. from the California College of the Arts, San Francisco. She is currently Assistant Professor of Ceramics at California State University, San Bernardino. Her work has been in over fifty national and international exhibitions, including her most recent solo exhibition, *Viscerlab* at the Robert V. Fullerton Art Museum, San Bernardino. She has been a resident artist at the Taller Cultural in Santiago de Cuba, Jingdehzen Pottery Workshop in China, and the Purosil Rubber Company in Corona, California.

Gil Scullion studied at the University of Texas at Austin and received his graduate training at The State University of New York in Albany. His work has been featured in exhibitions at Real Art Ways in Hartford, Connecticut, the De Cordova Museum in Lincoln, Massachusetts, the New Britain Museum of American Art in Connecticut and P.S.1 in Long Island City, New York.

Luke Shaw, born and raised in Lockport, New York, grew up watching Hanna-Barbara cartoons and his interest in the uses of robots by menacing entrepreneurs operates on the level of personal nostalgia. He is currently a student at the University of Rochester and will graduate with a B.S. in Neuroscience in 2010.

John Stephenson received a bachelor's degree and a master's degree in Greek art from the University of Georgia, and a Ph.D. in ancient Art History from Emory University, focusing on Roman and Egyptian art. He participated in archaeological excavations at Carthage in North Africa and archaeological field school at the American Academy in Rome. His sculptures have been exhibited across the nation. He currently teaches at Appalachian State University in North Carolina.

Brad Story is a native of Essex, Massachusetts and a seventh-generation boatbuilder. He studied at Kenyon College, where he earned a Phi Beta Kappa majoring in Art. His work has been exhibited at galleries throughout New England, in Seoul, Korea, as part of the exhibit *Flights of Fantasy* at Manchester Airport, and at the DeCordova Museum and Sculpture Park in Lincoln, Massachusetts. He has done large commissioned public art pieces at SeaTac Airport in Seattle and the Cape Ann Museum in Gloucester, Massachusetts. His work is in numerous private collections throughout the United States.

Heidi Taillefer pursued Humanistic studies at McGill University, which provided a foundation for much of the cultural and philosophical referencing in her work. She has worked as a commercial illustrator in parallel with her fine art production, her most notable contracts being with Cirque du Soleil, Richard Mille luxury watches and Infiniti car company. In her fine art work, she paints mostly about her philosophical observations and the technological development of the world.

Adrianne Wortzel creates interactive web works, robotic and telerobotic installations and performance productions, exploring historical and cultural perspectives by coupling fact and fiction and using new technologies in both physical and virtual networked environments. They reflect her immersion in the sciences, often with direct scientific collaborators. She is a Professor of Entertainment Technology/Emerging Media Technologies at New York City College of Technology-CUNY, a member of the doctoral faculty of the Interactive Technology and Pedagogy Certificate Program at the CUNY Graduate Center, and an Adjunct Professor of Mechanical Engineering at the Cooper Union for the Advancement of Science and Art. Her collaborator for A Well-Regulated Militia Bearing Arms is Jaymes Dec, a teacher and project manager at GreenFab, a high school program for students from the South Bronx, New York that aims to teach Science, Technology, Engineering and Math skills through classes on sustainable design and green technologies. Jaymes earned a master's degree from the Interactive Telecommunications Program at New York University, where he developed an interest in connecting everyday objects to the Internet. His past projects include JabberJockeys, a pair of networked underwear for sending intimate communications, and BottleHunt, a scavenger hunt for networked liquor bottles in bars around New York City. Wortzel's collaborator for archipelago.ch is Daniel Bisig from Zürich, Switzerland, who holds a Ph.D. degree in Natural Sciences. He is a senior researcher in the Artificial Intelligence Laboratory at the University of Zurich and holds a research position at the Institute for Computer Music and Sound Technology in Zurich. He is active as an artist in the field of artificial life art. His works include BioSonics, an interactive sonification of a growing organism, MediaFlies, a swarm based audio and video re-composition software, and Interactive Swarm Space, an immersive environment for swarm based audiovisual artworks.

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- Rhiannon Mercer, Exhibition Curator

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COVER: *archipelago.ch: St. Simmir Island* (detail), with Daniel Bisig & researchers Miriam Fend & Simon Bovet, AlLab, University of Zurich.

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