

Parodic Machines

Nick Bontrager, David Bowen, Matt Kenyon, Hye Yeon Nam, and Fernando Orellana

Curated by Paula Gaetano Adi

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Van Every/Smith Galleries

Davidson College 315 North Main Street Davidson, North Carolina 28035-7117

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Introduction

It is with great pleasure that the Davidson College Art Galleries presents *Parodic Machines*, featuring the robotic works of Nick Bontrager, David Bowen, Matt Kenyon, Hye Yeon Nam, and Fernando Orellana. Curated by Paula Gaetano Adi, *Parodic Machines* supports Davidson College's interdisciplinary liberal arts curricula through the exploration of art based in technology, engineering, and mathematics. Though each work relies on robotics, the makers are artists and the objects function as art. For example, in Hye Yeon Nam's *Please Smile*, five robotic hands detect and react to visitors' facial expressions, in an attempt to make viewers, quite simply, as the title suggests, smile. When individuals grin, the hands wave in gratitude. While the piece requires robotic technology to operate, the concept speaks more to the relationship between audience, artist, and art object—and the autonomy of such works.

All of the artists featured in *Parodic Machines* are making their mark in the field of robotic art; the Galleries extend heartfelt gratitude to each and every one of them for their commitment to this project. We also wish to thank Paula Gaetano Adi. Without her vision, dedication, and curatorial eye, this project would not be possible. Last but not least, the Galleries thank the Davidson College Public Lectures Committee, the Arts & Science Council, Davidson College Friends of the Arts, and the Mathematics Department, for their support of the exhibition and related programming.

- Lia Newman, Director/Curator, Van Every/Smith Galleries

Parodic Machines: The Legacy of the Helpless Robot

by Paula Gaetano Adi

"Irony is about contradictions that do not resolve into larger wholes, even dialectically, about the tension of holding incompatible things together because both or all are necessary and true. Irony is about humor and serious play. It is also a rhetorical strategy and a political method." — **Donna Haraway**

The relationship between art and machine is not necessarily a harmonious one; from Jean Tinguely's art-producing machines in the late 1950s, to both the robotic sculptures of Edward Ihnatowicz and Nam June Paik in the early 1960s, machine art has always been interested in addressing this tension with unexpected turns and humor. Attempting to approach the human experience in a world mediated and managed by electronic tools and devices, the works of artists creating machines often addresses technologically driven tendencies in human behavior, new agency paradigms, the integrity of the human (or animal) body, the tension in the relation artificial/natural, the mind/body problem, new structures of communication systems, and changing conceptions of labor.

In 1987, artist Norman White began working on the first of many versions of his *Helpless Robot*, a machine whose major accomplishment is "to do nothing." The *Helpless Robot* is an interactive work that unlike most robots is essentially passive. It rotates on a

large industrial lazy Susan, and it can do so only by enlisting the help of human beings. The *Helpless Robot* is incapable of movement on its own, but by means of its electronic voice urges gallery visitors to rotate it using a pair of side-mounted handles.

White's artwork set up a scenario of interactivity that tested the viewers' willingness to respond and obey a robot, and with its absurd behavior establishes the premise for questioning the social imaginary of what is expected of a machine. More than twenty-five years later, *Parodic Machines*, an exhibition at Davidson College, traces the strategies of five contemporary electronic artists by highlighting the methods, attitudes, and ethical positions that constitute the core of White's "parodic" legacy.

Motivations—and other categories related to intentionality—are the original and the principal drivers of action, which have an intimate relation with personality and agency. For engineers, scientists, and other developers of robotics and artificial intelligence, a robot is a

behavioral machine that is motivated and operates autonomously in its environment, both perceiving as well as acting in this space. In other words, by definition, an autonomous robotic agent must pursue its own agenda; a robot is an entity governed by purpose and able to exhibit a goal-directed behavior. However, where does this agenda come from? Every autonomous agent must be provided with built-in sources of motivation for its actions. Hence, if robots manage goals to satisfy their motivations, if they act to reach those goals, what then are the motivations of the *Parodic Machines?* What are their goals? What are their purposes? What are their programmed instructions?

Matt Kenyon's C3 is essentially a suicidal hexapod robot whose only mission is to drink Coca-Cola—a goal that will ultimately lead to imminent erosion and consequent demise. When C3 finds a puddle of Coke, it sucks the beverage up through an electrical pump, and then sprays it across itself. The acidic compounds found in the drink will eventually eat through the robot's skin, find their way to the circuitry, and cause the inevitable break down.

Like the C3, Hye Yeon Nam's robotic arms are clearly not designed for heavy, repetitive manufacturing work. Nor are they able to handle tasks that are difficult, dangerous, and tedious for human beings. Nam's mechanical arms neither assemble, bolt, mount, paint, carry, lift, prove, nor conduct quality control; they were created to just wave and say "hello" to smiling humans.

Fernando Orellana's interactive machines are designed to be used posthumously. By monitoring sudden fluctuations in temperature, infrared signal, and electromagnetic readings, his devices allow the dead to continue using their worldly possessions. Like a paranormal researcher, this artist extracts different objects from recent estate sales and creates techno-effigies that cannot be completely appreciated by any living being.

While Orellana's machines are waiting for otherworldly gallery visitors to activate them, David Bowen's flying robots are controlled by small swarms of houseflies. The diptera are essentially the brain of each device; the flies determine how the machines interact and respond to the space and the viewers. Bowen's unique hybrid robots' chambers contain enough food, water, and light to sustain up to 50 houseflies whose movements, in return, activate on-board microcontrollers responsible for the propulsion of the helium-filled blimps.

In a different line of work, Nick Bontrager built a fake and cheap version of the EVA pod and HAL 9000 from 2001: A Space Odyssey, in order to recreate the legendary scene before the "intermission"—the incident that provoked the revenge of the artificial intelligence machine to kill the human astronauts. Constructed largely of vinyl, Intermission exists as a large-scale installation, inviting the viewer to explore and dissect the space, and to deconstruct how autonomy is often simulated throughout the history of science fiction film.

Although the artworks chosen for *Parodic Machines* are diverse, the exhibition as a whole is informed by two main conceits. The first is a broad exploration of the functionality of an "art machine." The second is the actual questioning of an agent seen as a competent system of autonomy and determination. The artists in *Parodic Machines* do not see the machine as a canvas onto which to subject their anxieties, but rather as a refractive being through which they are able to examine humans and their characteristic modes of communication, interaction, meaning, and social significations, once removed from the ontologically closed domain of consciousness, reason, and reflection.

A parody casts doubt on the naturalness of what is being imitated; a parody embodies and brings to life actual historical tensions; a parody is both demonstratively critical and constructively creative. The robots and machines featured in this exhibit—like White's Helpless Robot—are definitely the disobedient machines. They are inappropriate; they are not functional; they have no intentionality; they are not goal-directed; they have no purpose for action; they are not useful. The robots in this show have no clear motivations—even if they do, those motivations resist the conventional understandings of a competent robotic agent. These are "art machines" and therefore they-are-doing-nothing but questioning the nature of their own existence, and with that, the nature of human existence itself.



Norman White, *The Helpless Robot*, 1987–2002, steel, plywood, electronics, custom software

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Nick Bontrager *Intermission*

Nick Bontrager is an interdisciplinary artist whose work and research explores the physical and conceptual nature of the moving image, game-based interactions and exchanges, and mankind's struggle to understand the vast unknown. His studio practice engages thematic elements of failure, chance, autonomy, and agency while fusing emerging technologies with traditional methods.

Formally trained as a photographer, the lens and the moving image are central to Bontrager's way of seeing and making. The language of mass media, broadcast television, and the history of film all converge and fight for influence in his works even when no physical camera or recording may be present. His sculptural work shares these sentiments and often are presented as a solution to the conversation in the form of a film or theatre set.

Bontrager has been working collaboratively with artist Joshua Penrose (Columbus, Ohio) since 2011 in addition to his own studio practice. Both artists share a fascination with game theory and how it can be applied to a traditional gallery exhibition, leading to several long term projects and exhibitions. Their current collaborative project includes the production of seventy-three short films by the artists based on telephone recordings from the White House.

Intermission is an interactive installation that poses questions of both robotic autonomy and the nature of how autonomy is often simulated within the history of film. Bontrager's installation is centered around a single scene in Stanley Kubrick's 2001: A Space Odyssey in which astronauts Dave and Frank seek a private space to discuss the possibility that omniscient supercomputer HAL 9000 may need to be shut down.

Through *Intermission*, Bontrager invites viewers to closely explore and dissect the work. The first exposure to the piece is through a small television monitor presenting a series of images. As the viewer moves around the space, the perceived perfection of the space becomes less and less apparent. The representation of HAL 9000 is understood as mostly wood and small motors, hidden inside of a smoky plastic enclosure. As visitors step into the Extravehicular Activity Pod, it becomes apparent that the structure, though nearly seven feet in diameter, constructed of sewn vinyl, is not actually suitable for space travel.

Nick Bontrager earned a BFA in Photography & Digital Media from the University of Houston, TX; and an MFA in Art & Technology from Ohio State University, Columbus, OH. His work has been exhibited nationally in a variety of public venues in solo and group shows. He is the 2011 recipient of the Fergus Family Fund award and the Urban Arts Space grant. He has served as the director of photography on both the feature length film So It Was With Us by director Colin McDonald and the documentary Covenant by director Michael Mercil. Both films have been chosen as official selections in multiple international and domestic film festivals. In addition to filmmaking, he has served as a technical designer and consultant for large-scale art installations, including works by artists Ken Rinaldo and Ann Hamilton. He currently resides in Fort Worth, TX, where he is Assistant Professor of New Media Art at Texas Christian University.

www.nickbontrager.com





Intermission, installation details left and right, 2011–2013, vinyl, fiberglass, wood, custom electronics, plastic

David Bowen Fly Blimps

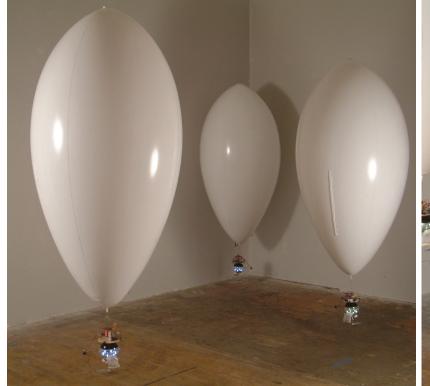
David Bowen's work is concerned with aesthetics that result from interactive, reactive and generative processes as they relate to intersections between natural and mechanical systems. He produces devices and situations that are set in motion to create drawings, movements, compositions, sounds and objects based on their perception of and interaction with the space and time they occupy. The devices he constructs often play both the roles of observer and creator, providing limited and mechanical perspectives of dynamic situations and living objects. The work is a result of a combination of a particular event and the residue left after the event. In some ways the devices are attempting, often futilely, to simulate or mimic a natural form, system or function. When the mechanisms fail to replicate the natural system the result is a completely unique outcome. It is these unpredictable occurrences that he finds most fascinating. These outcomes are a collaboration between the natural form or function, the mechanism and the artist. This combination can be seen as an elaborate method of capturing qualified data. Bowen sees the data collected in this manner as aesthetic data.

Fly Blimps consists of a series of three autonomous helium-filled blimps whose movements are determined by small swarms of houseflies. The flies are essentially the brain of each of the devices, determining how they interact and respond to the space and the other devices. Up to fifty houseflies live within chambers attached to each blimp unit. These chambers contain food, water, and light needed to keep the flies alive and active. The chambers also contain sensors that detect the changing light patterns produced by the movements of the flies. In real-time the sensors

send this information to an on-board microcontroller that activates motors connected to propellers which move the devices based on the predilections of the flies.

David Bowen is a studio artist and educator whose work is concerned with aesthetics that result from interactive, reactive, and generative processes as they relate to intersections between natural and mechanical systems. Bowen earned a BFA from the Herron School of Art, Indiana University, Indianapolis, IN, and an MFA from University of Minnesota, Minneapolis, MN. His work has been widely exhibited, including in solo and group exhibitions throughout the U.S., as well as internationally at venues in Russia, Belgium, Thailand, Spain, Norway, Ireland, Poland, Mexico, Japan, and Israel. Bowen has received numerous awards including the Prix Ars, international Cyber Arts Competition, Ars Electronica, Linz, Austria; an Artist Initiative Grant from the Minnesota State Arts Board, St. Paul, MN; Grand Prize in the 13th Japan Media Arts Festival, Tokyo, Japan; and Third Place in the VIDA 12.0 Art and Artificial Life International Competition, Madrid, Spain. He is currently an Associate Professor of Sculpture and Physical Computing at the University of Minnesota, Duluth.

www.dwbowen.com





above, left and right: Fly Blimps, 2010, plastic, electronics, houseflies, helium

Matt Kenyon Coke Is It

SWAMP was founded in 1999 by artists Douglas Easterly and Matt Kenyon who collaborated from the years 1999–2012. Kenyon now runs SWAMP solo in addition to being an Associate Professor in the School of Art and Design at the University of Michigan in the United States.

SWAMP (Studies of Work Atmosphere and Mass Production) focuses on critical themes addressing the effects of global corporate operations, mass media and communication, military-industrial complexes, and general meditations on the liminal area between life and artificial life.

Shopping malls and fast food chains tessellate around the structure of the automobile; corporate advertising looks to lure larger market shares through various campaigns of product identity worship; popular television orchestrates a web of marketing and entertainment that creates a field of memetic radiation; we are bombarded with an environment having little or no regard for creative exchange as people become variables in demographical, economic and rating system equations. The missing variable in all of these equations is the freedom and importance of the single individual who is usually disregarded in these culture-as-market movements.

SWAMP attempts to find creative expression within elements of culture that are inherently counter-creative.

In Kenyon's artwork on display in *Parodic Machines*, the routine destruction we do to our bodies, mitigated through corporate mass media, is comically expressed through a robot named C3 (parodying Coca-Cola's low-carb product C2).

C3 is a hex-crawler robot, outfitted with an onboard video camera and PH sensor, enabling it with the ability to search and find puddles of Coca-Cola

placed on the gallery floor. When C3 finds a puddle of Coke, it sucks the beverage up through an electrical pump, and then sprays the beverage across itself. The acidic compounds in Coke eventually eat through the robot's skin, finding its way to the circuitry, causing it to break down.

The robot is designed to search and consume until it kills itself. Companies such as Coca-Cola deploy marketing strategies that infuse culture with a sense of well-being and elevated self-worth, contradicting the actual benefits of the consumable product.

Matt Kenyon earned a BA from Southeastern Louisiana University, Hammond LA, and MFA in painting from Virginia Commonwealth University, Richmond, VA. His work has been exhibited nationally and internationally at numerous prestigious venues, including the Museum of Modern Art, New York, NY; Exit Art Gallery, New York, NY; MIC Toi Rerehiko Gallery, New Zealand; Science Gallery, Dublin, Ireland; The Edith Russ Site for Media Art, Oldenburg, Germany; and FACT (Foundation for Art and Creative Technology), Liverpool, England. His work has received the first prize for VIDA 7.0 Art and Artificial Life as well the first prize at the inaugural File Prix Lux—Art of 21st Century, International Festival of Electronic art in Sao Paulo, Brazil. His work is in the permanent collection of the Museum of Modern Art, New York, NY. He is currently an Associate Professor in the Penny W. Stamps School of Art & Design at the University of Michigan, Ann Arbor, where he teaches physical computing, video, and 3D animation.

www.swamp.nu

opposite: Coke Is It, 2004-2013, electrical and miscellaneous parts, custom software, robotic assembly, camera, pH Sensor, Coca-Cola



Hye Yeon Nam Please Smile

Hye Yeon Nam's work expresses social issues related to her own cultural identity, relationships, and responsibility. The first category of her work is about the status of women and more specifically, her own experience straddling two cultures—Korean and American. As a woman and Korean immigrant artist in America, Nam has struggled to adjust to her new culture. Every situation summons different roles, customs, and habits, which bring up different mental challenges. She attempts to illustrate her resistance against the conformities of society and of American and Korean culture by showing variable perspectives and physical dissonance.

Additionally, Nam is interested in exploring relationships through her work. As her family and most of her friends live far away in Korea, she tries to reflect on the importance of caring for one another. However, the concept of the social in her work is not limited to people, but is open to non-human beings such as nature, everyday objects, or robots.

The last category of her work deals with the artist's role in society. She often questions how arts and technology can improve our society. She has developed several community-based workshops. Even though art usually does not solve social issues directly, Nam believes it can reveal problems and persuade people to act. She notes, "Art should not merely be beautiful; instead, art can be a question, an argument, a proposal, a resolution, or a reflection of the various problems that we encounter in our world." Her greatest hope is "for her audience to learn more about themselves, be confident, and acknowledge our society's issues" as she has done through her work.

Please Smile is an installation involving five robotic skeleton arms that change their gestures depending on a viewer's facial expressions. The

work is comprised of a microcontroller, camera, computer, five external power supplies, and five wooden skeleton arms, each with four motors. It incorporates elements from mechanical engineering and computer vision perception to create a more expressive robot. When viewers interact with the robotic arms, they encounter unexpected reactions. Audiences can anticipate three different interactions with *Please Smile*. When the camera does not detect an individual, the five robotic skeleton arms choose the default position, bending their elbows and wrists towards the wall behind them. When someone steps within view of the camera, the arms point at the human and follow his or her movements. When the viewer smiles, the five robotic arms wave their hands. *Please Smile* attempts to foster positive audience behavior.

Hye Yeon Nam earned a BFA from Ewha Womans University in Korea, and an MFA at the Rhode Island School of Design. Nam is a PhD candidate at the Georgia Institute of Technology. Nam's art has been showcased in numerous exhibitions including at the Smithsonian National Portrait Gallery, Washington DC; Times Square, NYC; Eyebeam, DUMBO Art Festival, Brooklyn, NY; The Lab, San Francisco, CA; and in several festivals in China, Istanbul, Ireland, UK, Germany, Australia, Denmark, and Switzerland. Her work has been broadcast on the Discovery Channel (Canada) and on Good Day Sacramento, and featured in numerous publications including Leonardo Journal, Wired, We Make Money Not Art, Makezine, Business Insider, Slashdot, and Engadget, among others. Beginning Spring 2014, Nam will teach Digital Art as an Assistant Professor at Louisiana State University.

www.hynam.org





above, left and right: *Please Smile,* installation view, 2012, microcontroller, camera, computer, wooden skeleton arms, motors

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Fernando Orellana Shadows

Dying and birthing for generations upon generation, always arriving at a question, we hurtle through space and time, helplessly out of control. Approaching the future at an ever-increasing pace and plugged into one another ingenuously, we perpetually dismantle and assemble each other. Along the way encountering irregular moments of nirvana, keeping us interested and entertained.

It is through this prism that Fernando Orellana's recent artwork is born. Taking on varying forms and mediums, the visions that have surfaced of late lean towards conversations about the nature of reality, our place on the mortal coil, the relationship and communications we share with one another, and what may lie beyond the shackles of the living. Orellana questions, "Like the prisoners of Plato's cave, what dreams may come as we reawaken from the shadows into the blinding light?"

The interactive artworks found in the *Shadows* series are designed to be used posthumously. Inspired by paranormal research, spiritualism, and ghost folklore, these machines continuously search for the dead, attempting to allow the departed continued use of their worldly possessions. Extracted from recent estate sales, the personal objects found in these techno-effigies are in a constant state of potential energy, awaiting their owner's return. By monitoring sudden fluctuations in temperature, infrared, and electromagnetic readings, the machines try to open a channel or doorway into the neither world. By this, each machine gives the dead an opportunity to continue interacting in this world and the next.

Fernando Orellana was born in San Salvador, El Salvador, and currently lives in Troy, NY. He earned a BFA at The School of the Art Institute of Chicago, IL, and an MFA from Ohio State University, Columbus, OH. Orellano uses new and traditional media as a way of transmitting concepts that range from generative art to social-political commentary. He has recently exhibited at the Texas A&M University; Cultural Center of Spain in El Salvador, San Salvador; Museu d'Art Contemporani de Barcelona, Spain; Carrie Haddad Gallery, NY; Espacio Fundación Telefónica, Argentina; Exit Art, NY; LA Boral, Spain; The Tang Museum of Art, Saratoga Springs, NY; Glass Curtain Gallery, Chicago, IL; The Ark, Ireland; and The Biennial of Electronic Art, Australia. He is the recipient of a 2009 New York Foundation for the Arts Fellowship in Digital/Electronic Arts and a 2010 Full Fellowship Award at the Vermont Studio Center, Johnson, VT. Orellana is currently an Assistant Professor of Digital Art at Union College in Schenectady, NY.

www.fernandoorellana.com





above, left and right: Her Bell, 2012, wood, plastic, metal, electronics, motor, bell, LCD screen His Minerals, detail, 2012, wood, plastic, metal, electronics, motors, minerals, incense, LCD screen

Curator's Biography

Born in San Juan, Argentina, Paula Gaetano Adi is an artist, researcher, and educator working in sculpture, performance, interactive installation, and robotic agents. Using the human and nonhuman body as a point of departure, her work deals with different cultural studies of technoscience, particularly in regard to how its discursive effects and affects are inscribed in human subjectivity and how they can be reflected through art.

Gaetano Adi earned a degree in Audiovisual Communication and a postgraduate degree in New Media Arts, both from Blas Pascal University in Argentina. She holds an MFA with emphasis in Art & Technology from Ohio State University, Columbus, OH. Currently, Gaetano Adi is an Assistant Professor of Studio Art at the University of North Texas, College of Visual Arts and Design, where she coordinates the New Media Art program.

Gaetano Adi's works have been presented internationally in venues including the National Art Museum of China; MejanLabs, Stockholm, Sweden; ARCO Fair, Madrid, Spain; FILE Festival, Sao Paulo, Brazil; TransitioMX Festival, Mexico City, Mexico; BIOS4, Seville, Spain; National Museum of Poznan, Poland; BrandenburgerTor Foundation, Berlin, Germany; Museum of Modern Art, Buenos Aires, Argentina; and The National Centre for Contemporary Art, Russia. She received the First Prize in VIDA 9.0, the international competition on Art & Artificial Life—Fundacion Telefonica; and the First Prize LIMBØ, Museum of Modern Art of Buenos Aires, Argentina. She has received numerous grants including San Juan Bank Foundation, Argentinian National Endowment for the Art, Secretaría de Cultura de la Nación Argentina, Blas Pascal University, Ohio State University Presidential Fellowship, the Fergus Memorial Award (2009 and 2010), and the 2012 VIDA 14.0 Artistic Production Incentive Grant for Ibero-American Artists.

