



Elegy for Tesla

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An installation by Jeanne Jaffe

September 15, 2015 – January 30, 2016

DIRECTOR'S STATEMENT

Elegy for Tesla, conceived and created by Philadelphia artist Jeanne Jaffe, is a biographical narrative that integrates technology with sculpture, evocative soundscapes, theatrical sets, video projection, and stop-motion animations to create a dark and timeless, immersive psychological dreamscape. In her work, Ms. Jaffe often selects historical, mythological, and iconic subjects that embody disparate emotional and psychological characteristics.

This project differs from Jaffe's earlier installations due to its greater reliance on complex technologies. From its inception, this project was implemented as an interdisciplinary collaboration with the College of Engineering at Rowan University. Jaffe worked side by side with a group of engineering students from the college, but completed the more technical requirements with Rowan engineers Philip Mease and Anthony Merlino,

who were ultimately responsible for making the technology work.

When activated, motion sensors make the life-size Tesla dolls move and talk, and the smaller dolls twist and jerk. Digital technology is used to develop the speech soundscapes, which convey musical tonalities that suggest a range of emotions and psychological states. The computer programming harnesses the use of a "MIDI" keyboard to determine the choreography of the dolls' movements. Select keys were assigned to specific moving parts of the dolls. B flat, for example, moved the head left, C flat moved it right, and F minor activated the arms to go up and down. The inference that this is a marionette being controlled by hidden forces, is inescapable. In this case, the viewer is the puppeteer — controlling the activation as s/he moves throughout the space.

Where the work becomes seamless and brilliant is in the blending of the technological components with those created by the artist's hand, as in the sculpted dolls, birds, and clothing. One does not overwhelm the other, but rather each complements the other. This enables the real focus and purpose of the installation to come forward: Jaffe's unique expression of the narrative. Nikola Tesla was a rock-star in his day, an idol with a larger-than-life persona whose life ended ironically, in destitution and obscurity. The trajectory of his career provides the perfect backdrop for Jaffe's fascination with mythic twists of fate, as well as a pathway for her explorations of time, life, and interpersonal journeys.

Mary Salvante

*Curator, Gallery and Exhibition Programs Director
The Galleries at Rowan*



ELEGY FOR TESLA



Scientist and inventor Nikola Tesla (1856–1943) is an avatar of massive creativity whose fame should be much wider, given his accomplishments. With his many basic breakthroughs in the areas of alternating current, wireless transmission, robotics and even computer circuitry, and several hundred individual patents, Tesla has endured as a cult hero to engineers and other scientists. His way of working—hardly sleeping, working out inventions in his head, and drawing on a prodigious capacity for concentration—makes him a model for creative production in any field. The scale of his vision still dazzles; among many examples, he imagined a world-wide broadcasting system nearly a century before the Internet, and proposed pulling free energy from the earth's ionosphere.

But there is more to Tesla than that. His personal story contains tantalizing elements that read more like myth. His sacrifices to bring the strange new fire of electricity to the

entire world feel Promethean. The friendship Tesla had with a white pigeon in the parks of New York City, and the vision of overwhelming light he experienced when the pigeon died, vibrate with overtones of fairy tales or hagiographies. His international renown and success, followed by a fall into obscurity and near-poverty in old age, recall the arc of heroes of Greek tragedy.

It is this Tesla who captured the imagination of Jeanne Jaffe, leading to her ambitious art installation, *Elegy for Tesla*. Jaffe brings to this project a sensitivity to that mythic plane where humans and animals can speak to each other, as evidenced in her reimagining of *Little Red Riding Hood*, with the wolf as the victim, in an outdoor exhibition (*Facts & Fables*, the Schuylkill Center for Environment and the Arts, 2011). In *Elegy for Tesla*, she gives us a kind of dream of Tesla, a walk-through passion play in which Tesla himself comes to life via animatronic figures, speaks to us,



and seems to usher us through artifacts of his scientific imagination, while accompanied by his beloved pigeons.

An oval-framed video—a reflected diptych of rushing water running nearly the length of the back wall—dominates the gallery space like a huge, activated mandala. Its close-up footage of Niagara Falls refers to Tesla's central role in the world's first major hydroelectric project, drawing on Niagara's tremendous power, from 1895. The image of surging water and





its enveloping sound also serve to give the installation a background of pulsing power, an analog for other things: for the high-voltage electricity Tesla explored, and for the fire-hose profusion of ideas that underpinned his life and work.

Of the multiple sculptural figures of Tesla in the room, we first encounter an old, diminished figure, literally smaller than the prime-of-life Tesla standing farther in. When a viewer nears, this figure wakes—a

self-moving marionette—raises his hands as if beseeching our understanding, and speaks about his work, in a voice that seems to come from very far away. He stands alone on a craggy island, suggesting the rocky isle of Manhattan, the place of exile from his original home in the Balkans (Tesla was born in Croatia to Serbian parents).

But this island is only big enough for one, making plain Tesla's self-isolation: an exile from normal human life that began as a renunciation for the sake of his work, and grew more severe in his later years. In this fable-like space, only the pigeons remain to bring him solace; surrounding him, they also seem to act as carriers of his ongoing inspiration, arising from the wellspring of his deeply intuitive connection to the natural world.

Smaller Tesla doppelgängers, that shiver and twitch on close approach, are more the size of traditional marionettes—centuries-old fixtures of theatrical magic that beckon us back into a world of childlike wonder and mystery. Tesla, an apparent “magician” of





electricity in his formal black tailcoat (remember Tesla in the film *The Prestige*?), certainly caused amazement of that kind with futuristic demonstrations such as his display of fluorescent signs—the first of their kind—at the Columbian Exposition in 1893. And he courted this kind of response, using his dramatic flair to draw the interest of the press and the major financial backing that he needed.

Jaffe's ongoing work with animation and animatronic movement (and with puppetry, its predecessor) gives her a close preexisting alignment with this aspect of his work. The motion-sensor technology underlying the figures' responsive movement and speech is deeply Teslian in its antecedents. Tesla's work on energies across the electromagnetic spectrum was imbued from the start with

a sense of their ability to act at a distance, through what he speculated was some universal etheric medium. Other than his groundbreaking work in radio (acknowledged by the Supreme Court as preceding Marconi's) and remote control technologies, Tesla's visions for wireless electronics had to wait almost a century for wider adoption. Smart phones, smart houses and related features of 21st century life are direct, if delayed descendants of this aspect of his legacy.

Jaffe also used 3-D printing, a still-developing technology with echoes of Tesla's wireless vision, to fabricate several iconic objects associated with his scientific projects. Tesla's paradigm-shifting alternating-current induction motor; the tower of Wardenclyffe, part of Tesla's unrealized grand project to beam information and energy around the



world; and the small boat that was the first-ever remote-controlled device, appear here as ghostly, monochromatic models, as if perfectly extruded from Tesla's mind's eye. A short film using stop-motion animation offers a silent, imagistic narrative of Tesla's life, in parallel to



the wider tableau of the installation. Tesla lived long enough to see not only the widespread adoption of some of his work, but also the failure of his greater visions, of worldwide free energy and a world where war would be rendered obsolete by technology-driven prosperity. He died at age 86, in the middle of World War II—a horrifying rebuke to his dreams of peace and progress. In addition to the near-life-size figure of an older Tesla, Jaffe has included here the last known photograph of Tesla, showing a face that seems haunted and stunned. Jaffe chooses to highlight this part of Tesla's mythos: the creative individual who has reached that stage of life where he or she is faced with the task of acknowledging and accepting what

has, and has not, been achieved. As with everything else, Tesla seems to embody this life-cycle imperative in a monumental way. For Jaffe, *Elegy for Tesla* also marks a shift away from the more abstract and suggestive sculptures she has created in the past, toward an art that opens itself to human concerns such as the psychological tasks of aging and loss. Interested in engaging audiences more directly, she is also reaching out to people outside the art world, including those in the fields of engineering, science, and history. Jaffe shows us a Tesla who is haunted by the failure of his visions to be understood and adopted. In this light, the background video takes on other shades of meaning. Its endless



outpouring of water comes to stand not only for the power inherent in water, and the boundless potential energies of electromagnetism, but finally for the formless ocean of dreams from which every person and all human ideas emerge, and into which they will subside. Tesla and his grand dreams continue to haunt us as we dream our own way into the future.

Miriam Seidel is a writer, critic and curator based in Philadelphia. She conceived and wrote the libretto for Violet Fire, an opera about Nikola Tesla, with music by Jon Gibson, performed in Philadelphia, Belgrade and New York.



ARTIST'S STATEMENT

Early on as an artist, I attempted to give concrete form to intangible sensations and early bodily experiences. This was accomplished by creating hybrid forms of mixed origins of experience - fusions of animate and inanimate worlds. Body fragments, vegetative processes, and microscopic life fuse, mutate, and morph, and the resulting objects invite recognition, while remaining mutable, suggestive, and indeterminate, simultaneously familiar yet strange.

As my work progressed, the focus shifted from the exploration of these hybrids of pre-verbal memories, to an interest in the impact of culture on our experience and the relationships of the body, language, text, history, and image, within a spatial format. The combinations of various disciplines such as history, science, mythology, and psychology resulted in an exhibition of installations that include sculptures, marionettes, stop-motion animation, sound, interactivity and sensor driven animatronic figures.

The first of these interdisciplinary installations that I created examined culture through the retelling of childhood folktales. Little Red Riding Hood as a Crime Scene was situated in a pine forest at the Schuylkill Center for



Little Red Riding Hood as a Crime Scene

Environmental Education.. This installation reversed the idea of victim and victimizer. Two huge legs were enlarged and digitally printed from small legs that I sculpted and cast in resin, to represent Little Red Riding Hood. The scale shift of these enlarged body fragments converted her into a giant. The wolf, now perceived as small, was on his back on a cabin floor, wounded, with the red cape running under him like a river. The text popped up from the ground and appeared as individual letters, through which the viewer was encouraged to walk. “What big eyes you have. What big teeth you have,” became the words of the wolf speaking to Red Riding Hood as they also metaphorically spoke to human greed.

The next step in expanding my exploration of technology and interactivity was the installation of T.S. Eliot’s Four Quartets, an advancement into culture and language through poetry. In this three-part installation

at Marginal Utility Gallery in Philadelphia, the last room contained small marionette-like figures in hospital gowns suspended in a floating field of rocks and roots. As the viewer approached, a sensor was triggered that caused the figures to twitch and recite, in multi-layered incantations, excerpts from “East Coker” (a poem from The Four Quartets,) beginning with the phrase “I said to my soul, be still.”

Elegy for Tesla is the most complex of these installations and engages culture at the level of history, mythology, and science. It involves interactive technology so that the audience becomes an active part of the installation, at times participating in direct dialogue with the Tesla figures at various stages in his life. A combination of history, science, mythology, folklore, and text, the installation occupies a hybrid space fusing sculpture, marionettes, theater, performance, and interactivity. In the installation, time proceeds backwards, starting from Tesla’s older self and leading to his younger self, both of whom verbally reflect on their experiences. Simultaneously, all thoughts past, present, and future begin to overlap, creating a multi-channeled reflection on life’s trajectories.

Jeanne Jaffe



Jeanne Jaffe is the recipient of fellowship grants from the Gottlieb Foundation, the National Endowment for the Arts, the Pennsylvania Council on the Arts, the Independence Foundation, Mino Artist Residency in Japan, the Mid Atlantic/NEA, the Leeway Foundation, the Virginia A. Groot Foundation, Yaddo Artists Colony, Rutgers's Innovative Printmaking Workshop, and was twice a finalist for the Pew Fellowship in the Arts in sculpture. Jaffe is a Professor of Interdisciplinary Fine Art at the University of the Arts. She has also taught at Tyler School of Art, Temple University, and Swarthmore College, as well as in a multidisciplinary program at the Annenberg Center Arts in Education Program at the University of Pennsylvania.

Her works have been exhibited both nationally and internationally at such places as Pennsylvania Academy of the Fine Arts Museum, Delaware Art Museum, Hillwood Art Museum, Mino Washi Museum in Japan, Michener Art Museum, The Royal Scottish Academy of Edinburgh, Scotland, Museum Rijswijk in Holland, and London Craft Council Gallery in England. Additional exhibitions in the Philadelphia area include Marginal Utility, Gallery Joe, the Painted Bride, the Philadelphia

Art Alliance, and Fleischer Art Memorial. Her work has been reviewed extensively, including in *Art in America*, *The New York Times*, and *Sculpture Magazine*.

Jaffe's works are included in many private and public collections in such places as Pennsylvania Academy of the Fine Arts Museum, Zimmerli Art Museum, New Brunswick, N.J., Abington Sculpture Garden, Abington, Pa., Rutgers Center for Innovative Printmaking, New Brunswick, N.J., and Museum of Ceramics at Alfred University, Alfred, N.Y.

Jeanne Jaffe holds a B.F.A. from Tyler School of Art and an M.F.A. from New York State College of Ceramics at Alfred University.



T.S. Eliot's "Four Quartets"

ABOUT NIKOLA TESLA

Nikola Tesla was born on July 10, 1856 in Smiljan, Lika, which was then part of the Austro-Hungarian Empire, in the region now known as Croatia. He immigrated to the United States in 1884 to work for Thomas Edison, but soon after struck out on his own to set up laboratories in which he developed a range of electrical devices such as the AC induction motor and the Tesla coil, originally used in the development of the radio.

As interest in alternating-current system grew, Tesla was put in competition with Thomas Edison, who was intent on selling his direct-current system. During this period Edison waged a "War of the Currents" campaign in an attempt to undermine interest in AC power.

Undeterred, in 1895 Tesla went on to create what was among the first AC hydroelectric power plants in the United States at Niagara Falls. The following year, it was used to power the city of Buffalo, New York, a feat that was highly publicized throughout the world. The AC system would quickly become the preeminent power system of the 20th century, and has remained the worldwide standard ever since.

Throughout his career Tesla was a pioneer in other discoveries such as radar technology, X-ray technology, remote control and the rotating magnetic field—the basis of most AC machinery. He routinely conducted elaborate electrical demonstrations for the public that garnered him a reputation as an electrical wizard.

His boldest dream was to build a global, wireless communications system that would be transmitted through a large electrical tower providing free electricity throughout the world.

As he aged his ideas became progressively more impractical. He grew increasingly solitary, devoting much of his time to the care of wild pigeons in New York City's Bryant Park. Destitute and reclusive, Nikola Tesla died on January 7, 1943, at the age of 86, in New York City, where he had lived for nearly 60 years. Over half a century later, the legacy of his work became the foundation for today's digital technology.

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THE ARTIST'S INTERNS

Demi Jorge

Meagan Lynch

Cara McCaffrey

Casey Myers

Bridgett Pauro

Morgan Penza

THE ENGINEERING CLINIC STUDENTS

Mehrdad Bazazan (ME) Kevin Mongiello (ECE)

Niclas Grant (ECE) Chris Russo (ECE)

Ryan Koenisburg (ECE) James Rycek (ME)

Justin Liu (ECE) Scott Sprindis (ECE)

Patrick Mawhinney (ME) Joe Watson (ME)

Mike Mayfield (ECE) Zach Zeitler (ECE)

CATALOG DESIGN

Stephanie Gerhard

CATALOG DESIGN ELEMENTS

Shelby Clouser

PHOTOGRAPHY

Ken Yanoviak



