



**DIGITAL ART AND FEMINISM: A SURREAL RELATIONSHIP**  
Anne Swartz

## DIGITAL ART AND FEMINISM: A SURREAL RELATIONSHIP

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Many of the images in this exhibition reveal similar interests, themes, and aesthetics to those seen in feminist Art.<sup>1</sup> The artists—Emilia Forstreuter, Jennifer Hall, Claudia Hart, Yael Kanarek, Jeanette Louie, Ranu Mukherjee, Mary Bates Neubauer, Marie Sivak, Camille Utterback, Adrienne Wortzel, and Janet Zweig—rely on technology as a tool to explore geopolitics, geological phenomenon, obsolete media, data streams and sets, illusion, shifting identities, phantasmagorias, eroticism, bodies, landscapes, geography, and memory. They are not afraid to confront assumptions or propaganda, even challenging conventions and traditions. They show us diverse, alternate domains and generate narratives of augmented worlds.

Common to their artworks is the surreal, employed innovatively and underscored by the radical politics of feminism to change society in order to advance it. It is a kind of new romanticism where the real is meshed with fantasy so that the boundaries between the two dissolve. These artists have created pieces that require the viewer's time; scanning and experiencing the entirety of their respective works over time transports one to their wild and imagined realms. It is easy to lose one's bearings with these works because they rely upon mysterious disorientation to the viewer's prosaic and commonplace experiences. It is a situation that is wholly based on the personal, which has been one of the cornerstone themes of feminist art.

Digital art has an inherent feminist issues to it. Artist Mary Bates Neubauer termed the “new macho challenge for this generation of women [is] digital technology. . . . [because] the field is still dominated by men.”<sup>2</sup> Utilizing technology to make art is, interestingly enough, one of the aspects of the programming world's fascination with digital art.<sup>3</sup> For the artists in this exhibition, digital technologies are ways to express content that is gender related. And they approach technological innovation differently than men, which is significant because it is associated with men rather than women.<sup>4</sup> The focal point of this exhibition is that

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<sup>2</sup> E-mail to author from artist, August 11, 2014.

<sup>3</sup> Janet Abbate, *Recoding Gender: Women's Changing Participation in Computing* (Cambridge, MA: MIT Press, 2012), 69 and 98.

public perception can be changed to allow recognition and acknowledgement of the role of women artists in innovating new technologies as a pathway to new ways of thinking and experiencing gender.

A group exhibition of this sort allows the viewer to grasp how the artistic chorus of voices are stronger together in opening up sensibilities and presumptions about gender in the world today. Initially, the use of technology in art by women focused primarily on the computer as a surrogate for the human. Earliest investigations centered on the internet and the use of after effects. More recently, rapid prototyping, social media, and sculptural forms allow artists to work in a truly intermedia format and cross platforms since the thing in the computer can be output in many different ways.

Exhibitions such as this one permit the viewer to see how communities mesh when artists working independently of one another respond to similar social forces. There are women who go into the male territory of art and technology and resist gender identification and there are women who bend the technological into female territory of the psychological and the affective. Gender is not invisible in technological art, because of the tendency to use nature, the body, or the personal often in atypical and iconoclastic presentations.

Some of these artists openly profess their feminism, like Janet Zweig who calls herself a “card-carrying feminist.”<sup>5</sup> Feminism means equity and access without regard for gender and feminist art makes the focus of the art into a celebration -- envisioning of typically unseen women’s experiences as part of the infinite pantheon of images and representations. The hunger for feminist art remains strong, partially because patriarchal components and factions within the art world limit women artists in accessing opportunities and support. Additionally, there is constant interest in seeing the range of women’s experiences in art and as art.<sup>6</sup> Though not all of these artists identify as feminist, there are recurrent threads and themes in their art which demonstrate the dominance of feminist art’s influence.

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<sup>4</sup> Cf. Judy Malloy, “Preface,” in *Women, Art, and Technology*, edited by Judy Malloy (Cambridge, MA: MIT Press, 2003), xivi-ixx.

<sup>5</sup> E-mail to author from artist, June 23, 2014. Cf. (<http://www.cardcarryingfeminist.com/>). Some of the artists were mute about their relationship with feminism.

<sup>6</sup> Not all women who make art identify as feminist, but, in this examination, I will read the art included in this exhibition through a feminist lens because Feminist Art has been one of the most singularly powerful forces and phenomenon in late 20th and early 21st century art. The disinterest in labeling oneself feminist comes from a generational divide when many women tried to diminish any indicators that they were women (“If I call myself a feminist then people will know I am a woman—a verboten thing in the art world which calls attention to a difference I don’t want known”). Or it stems from an unwillingness to associate oneself with a radical political movement, both within the art world and beyond (“I don’t make Feminist Art, I make art. If I call my work feminist, then it is suddenly activist and no longer interesting art.” or “If I label my art feminist, then my dealer will drop me”). Another challenge to associating oneself with feminism is the current tendency to see feminism as outmoded, as no longer necessary (“I haven’t faced any barriers to circulating my work”). I don’t accept any of these ideas because for each one of them, I can demonstrate a disproportionate number of examples of the inverse. These anonymous quotations come from several different conversations I have had since 2005 with women who make digitally-based art. Each time one of them comes my way, I note it. An easy way to collect statistics on these disparities can be found by looking at the art of the Guerilla Girls (<http://www.guerrillagirls.com/>), the Brainstormers (<http://www.brainstormersreport.net/>), and the recent work by artist Michol Hebron (<http://micolhebron.com/>).

## ARTISTS AND WORKS IN THE EXHIBITION

### EMILIA FORSTREUTER

Emilia Forstreuter calls herself a designer, animator, and director. Her work fluctuates between her editorial work and her art. One of her signature pieces is *Yonder* of 2009 (3:25 minutes), a 2D/3D animation,<sup>7</sup> which the artist intended as a way to meditate on the simultaneous simplicity and complexity of life and organic matter expressed in tiny increments. The artist calls these small components “cells” she repeats into complex configurations that morph and glide into new configurations and formations. The artist wanted to “create an alternate world that seems foreign yet at the same time familiar.”<sup>8</sup> The soundtrack by Sam Spreckley includes nature sounds which are similarly evocative of the music of life rather than specific referents.

In this animation, the viewer is taken on a journey through swirling, descending, ascending, mounting, and unfurling forms that seem almost familiar, but remain immediately beyond our recognition. They elide just beyond our ability to apprehend and process them as they morph. The piece begins with a monochromatic field of plants with seed pods. Off in the distance—*over yonder*—there is a spectacularly colored landscape or terrarium of wiry little natural forms. We follow an orb that glows and travels through a zone which starts to resemble an underwater realm with sea flora and fauna. Eventually the orb mutates and reforms into a petal as part of an assemblage of a symmetrically rendered flower-shaped hive which takes the shape of a butterfly/octopus then a slowly spiraling set of wings with feathers finally arriving at the brightly colored domain from the beginning. We are in some kind of science fiction environment.

Such transformations in this piece have a surreal quality crossing between known and imagined, existing in a liminal state of neither/nor real or fantasy. Using patterning, spiraling, and evanescent shapes, Forstreuter crafts fluid shapes that recall all kinds of natural ordering and patterning systems, such as the Fibonacci system. Alongside organizing principles, there is also the

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<sup>7</sup> The artist’s description of the process for creating this piece is as follows: “*Yonder* is a 2D/3D animation. There are 2D graphics created in Illustrator which are animated in After Effects as well as 2D graphics which are animated in Cinema 4D. There are also 3D graphics created and animated in Cinema 4D. Other great animation tools were Trapcode Echospace for After Effects and Mograph which both suited really well the idea of repetitive forms. As a compositing software I used After Effects, ([http://www.emiliaforstreuter.de/yonder\\_about.html](http://www.emiliaforstreuter.de/yonder_about.html)), accessed August 3, 2014).

<sup>8</sup> Artist’s website, ([http://www.emiliaforstreuter.de/yonder\\_about.html](http://www.emiliaforstreuter.de/yonder_about.html)), accessed August 3, 2014.

metamorphosis. The immersive shape-shifting that permeates the work--alchemical aspects that disorder the seeming linearity of the work. These features help the artist accomplish the vividness and energy she seeks.

From a technical standpoint, the process required an intense level of involvement from the artist to achieve such intricacy in the execution. The microscopic realism recalls the Northern Renaissance focus on rendering every infinitesimal detail clearly visible regardless of implied distance within the space of the landscape. Like Northern Renaissance painting, the miniscule, diminutive forms somehow also read as spacious and boundless.

## JENNIFER HALL

Jennifer Hall, among many other artists, turned her attention to biological material as a medium for her art, embracing a perspective informed by neuroaesthetics and embodied aesthetics. Further she embraces the body and its bio-chemistry, its activation, and its mysteries (Hall terms this aspect the “kinetics of the unseen”).<sup>9</sup> Using technology, Hall performs the body, literally using it as the raw material for her art.

Using interactive media she has investigated a wide range of biological and corporal topical issues and concerns, including epilepsy in *Elileptiform Sterling Silver: 5 REM Consciousness as a property of Matter Series* and *Elileptiform Polymer Resin: 5 REM Consciousness as a property of Matter Series*, both of 2006 and 2008 respectively in the materials mentioned in the title of each. Hall describes for making these pieces as follows, “First a data file was created using signals from the temporal region in my brain, then the file was wrapped around a digital spline then printed as a rapid prototyped object.”<sup>10</sup> They start as a 3D interface and then each becomes a sculptural artifact. With an ambulatory EEG machine, the pattern of a brain wave of a single epileptic event is sampled during a seizure to document it. She then translated a 2D vector graphic into an object, a crown, through the process of rapid prototyping before finally casting the image in sterling silver and polymer resin. Hall’s interest in technology allows her to work across disciplines in vital, versatile ways. She regards the transformation as “an

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<sup>9</sup> E-mail to author from artist, July 9, 2014.

<sup>10</sup> E-mail to author from artist, November 13, 2014.

object separate from its source.”<sup>11</sup>

In this work, Hall converts her disorder into data and, ultimately, into images and objects. The physicality of the final metal and plastic bracelets belie that their data, their informational source, evolved out from an otherwise invisible, internal source within the body of the artist. Other women artists have used brain waves as source material for their art, including Janine Antoni's performance *Slumber* of 1994 and Mariko Mori's installation *Wave UFO* of 2003. What distinguishes her project from these other works is the display of difference in the form of disability in her meditation on her neurological condition.

By breaking down the technology/body divide, Hall removes the separation between herself and her art. The theatricality of such a scene infuses static art objects with an intervention, allowing the viewer to experience her physical presence by making her bodily functions into the phonemes and lexicon for her work, what the artist terms “an empathetic participation.” She is both protagonist and performer in her art. The improvisational aspect of the work comes from the unknown processes that go into a complex, recurrent disorder and puts it on view as a spectacle—in the spectacular sense of the word.

Hall's twist on electronic media is to use her internal electricity to draw and design her images and forms, a seeming update of Roland Barthes's 1980 quip “What does my body know of photography?”<sup>12</sup> Her translation of her innermost experience of her body becomes both a dramaturgy and a highly specialized self-portrait. She allows her brain's participation in her artwork, an aspect that reveals herself in the most vulnerable and concrete way possible. Her unprocessed matter transformed into a crown and then a bracelet is her fictionalization of her life, her consciousness, and her experience in her art. The choice of jewelry as the final form in silver and polymer and another variation in chocolate is a way to enthrall the viewer through desire for this attractive materials.

## CLAUDIA HART

Claudia Hart's *Optic Nude* of 2013 (23 minute loop) is a 3D animation projected on a floating projection field rendered to look like velvet. Hart's work closely resembles several aspects of its inspiration, an image by British photographer Jean Straker of a nude blond woman who is covered by a dotted light pattern that varies between gridded regularity in the background and sensuous

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<sup>11</sup> Jennifer Hall, *Epilepiform: REM:5*, 2001 and 2003, [Artist's Narrative on Process and Meaning], ([www.dowhile.org/physical/projects/epilepiform](http://www.dowhile.org/physical/projects/epilepiform)), accessed August 15, 2014.

<sup>12</sup> Roland Barthes, *Camera Lucida* (New York, NY: Hill and Wang, 1981), 4.

curvature on the body from the chin down. The light pattern over her body has the effect and impact of accentuating it, much the way a gossamer-weight fabric dress reveals more than it conceals. Her legs are bisected by the bottom frame of the image but there is space over her head creating a darker surround highlighting her light-colored hair and over-emphasizing her slightly downcast gaze at the viewer and her dynamic pose with her midline accentuated by longer curving dotted lines in stark contrast to the regularity of the light pattern in the background on her side.

Hart's source is a starting point for her investigation making her appropriation more inventive than a straight reenactment of the original. Avoiding making a carbon copy of this image, Hart has shifted certain aspects of it that change the meaning, making it her own. Projecting an animated image of a female figure entirely covered with a range of visual patterns, strobing light simulations, and simulation of a curtain fluttering behind, alongside, and around her. While her curves and whole body are evident, in contrast to Straker's image, Hart covers her head making it less available than the figure in the original and includes the lower legs. The image reads closely as a *déjà vu*, but it also expands in uncanny ways.

The figure is less obviously defined, more like an apparition since we can't read her facial features or any of her specific anatomical features. While the pose in the animated work resembles that of Straker's figure, Hart modifies it and makes the arm positioning more dramatic and slightly more flamboyant, simply by raising the arms up. The moving curtain has the impact of heightening the elusory quality. Further, using a remix of Buddhist monks chanting for the audio adds a layer of liturgical narrative of a personal journey of discovery (definitely not an aspect of Hart's source). Straker's oeuvre and all the liberation he ultimately achieved, does not counteract the fact that his work was made within a tradition of Surrealist photography and film practices with the emphasis on the figure's dueling sexuality and inaccessibility and the histories of girlie pics and pin-ups, and still fits within a patriarchal discourse about the woman's body, highlighting her sexual availability.

In contrast to customary subject matter and symbolism in surrealist art, Hart's covering of the female face prioritizes the indefatigable path of the figure, promoted in the installation of the work because it is projected on a loop. She takes the temperature of the original and provocatively raises it, but not by foregrounding the figure's sexual availability; instead, she emphasizes the figure's ambiguity while still providing her concupiscent presence in the shape of her body made evident by the flowing fabric slowly moving across it. Hart opens up the meaning of her body considerably. The possibilities are expansive: is the figure involved in some kind of monomyth adventure? Is the figure a shadow and part of an Orphean nether- or mirror-world? Is she a gargoyle on some kind of fantastical, active stage? Contemporizing the image, Hart turns the monochromatic photograph into a Technicolor image with a luminous palette based on black velvet paintings. The figure is also moved further back into the space of the image so the illusion of the curtain fabric occupies more of the available geography of Hart's animation.

The transition away from computer-based media serving the needs of the gaming industry, and its service to the military, has been a key component of Hart's practice, which belies many of the subtle and obvious shifts she makes in *Optic Nude*. Her work is a kind of augmented reality in its suggestiveness incorporating her imagination with the technical processes of the computer. She takes the macho depiction of the woman and turns it on its end. Remarking on her representation of the female body, she notes that it is a contradistinction to games, she crafts a politicized alternative: "By using the same 3D medium to create figures that reference romantic femininity while eschewing ubiquitous strategies of speed and endgame shooter mentality, I am positing feminine beauty and erotic sensualism as a kind of refusal."<sup>13</sup> Her practice has become widely influential because of her alternative to the conventions of computer-animated women as over-eroticized sex pots, downtrodden women, Amazonians, or targets for extreme violence.

## Yael Kanarek

Yael Kanarek's *Clock: Jerusalem to Tel Aviv* of 2010 is a video work on a one year cycle in which we see the highway night view of Highway 1 from inside a taxi van on a journey that takes approximately one hour to drive and is 67.4 kilometers or 41.9 miles.<sup>14</sup> The video clips are seen in three simultaneous frames within frames and have been synchronized to a clock at the half, three-quarter, and full hours marked by the sounds of church bells, dogs, and crows. The description of the piece from a 2010 exhibition press release:

Likened to the idea of time travel, the work poses a theoretical beginning in the ancient city, a city under siege, and an ending point in one that is modernized and more free. . . . "Narratives about the struggle over space are universal," says Kanarek. "I am interested in psychological spaces of action."<sup>15</sup>

Taking the specific—a length of highway between one of the most religiously politicized cities and a more secular city—the artist generalizes this particular highway space and place which can be read as a ruse or a subterfuge, a kind of sleight of hand. In an interview about her work, Kanarek remarked on this piece:

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<sup>13</sup> Claudia Hart, "Beginning and End Games: A Parable in 3D," *Cultural Politics*, volume 9, issue 1 (March 2013), 92.

<sup>14</sup> The piece includes custom software made with Shawn Lawson.

<sup>15</sup> "Yael Kanarek: Notyetness," press release by bitforms gallery, 2010, (<http://www.bitforms.com/exhibitions/yael-kanarek-notyetness/press-release>), accessed August 14, 2014.

What looks like a repetitive video of a road trip at night is in fact a clock that keeps time, the actual present time. You remain on the road in a state of notyetness between these two cities, yet time keeps ticking away. This is a situation that I, in my Israeli self, can come into and engage. I'm looking at "tight places" in the landscape of my reality. Israel/Palestine is one, as I grew up in Israel. It is also a tight place for millions of people, by way of the news media.<sup>16</sup>

The clock acts as a linear measurement and the drive also depends upon linearity—motion in this instance. The receding squares suggest the diverse registers of temporality. The repetition of space in serial form could be seen as disjointed and out-of-sync—different experiences of time resemble different experiences with space and place.

The time in Jerusalem and Tel Aviv can be seen as occurring differently in Kanarek's piece. Time is a special issue in Jerusalem where the ancient differentiates and determines which group has claims on the present. Time there occurs as an alternation or a compression or an extension of a displaced, fractured, contradictory history and illogical model of time, depending upon who is claiming privilege. This journey is a borderless transition in a region of the world with complicated borders. If the rider were to travel east, immediately a border would be encountered that distinguishes the Israeli who can move freely from the Palestinian who potentially confronts challenges to passage. The clock component of this work denies the transition you experiencing on such a journey. The simulated world creates distance from the scale of the events and their potential for fatalities and annihilation. These images become a way for us to expand our world. The passage of time here is literalized by these separate frames.

Through technology we build our culture and our configuration of history, which Kanarek highlights here. There is a stress and pressure created by learning about this event and seeing it depicted in multiple states of time. Through repetition, it becomes a kind of hypertext: literal, symbolic, historical, cultural, and universal.

## **JEANNETTE LOUIE**

Jeannette Louie's *Amygdala* of 2013 (10:09 minutes) is an experimental film using quasi-documentary style filmmaking, dilating the iris of the camera in and out on images of the brain, the body's fibers as forested landscape, images of aggression and

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<sup>16</sup> Janet Moran, "Yael Kanarek: Notyetness," *Artlog*, September 20, 2010, (<http://www.bitforms.com/pdfs/bibliography/kanarek/2010Artlog.pdf>), accessed August 17, 2014.

anxiety, and meditative images of a solo figure with a narrative about this primitive emotional, executive functioning, and memory center of the brain.<sup>17</sup> In this film, she anthropomorphizes the amygdala as female, referring to her and she in the narration. She overlays the computer-manipulated image onto photographs. The layering of the body's vessels are overlaid with trees and forest images, interspersing the remote areas of a dense woods with that of corporeal tissue. Switching back and forth between the images of the body parts and trees against the sky, flowing water, wind rustling trees, the appearance of a pulsating sun, a close-up iris in view of eyes, a slowly dilating open image of trees, an image of an aggressive barking dog is immediately followed by young girl in a swimsuit playing with a house, a blurry image of a boxer, a deep sea diver, clapping hands, fire fighters responding to a call, a figure walking in the woods both alone and with a companion, sepia images of trees, abstract mottling, figures in gas masks, night vision images of bombing, combat, and climactic effects. The impact is spectral and illusory, recalling dream and nightmare states where images rapidly flash. In this techno-world, Louie says the body is mysterious space.

From her personal experiences with Post Traumatic Stress Disorder (PTSD) and her need to make sense of her own difficult past, Louie presents a story about processing emotion and making sense of anxiety and fear. Video proved an important means for Louie who described the pleasure and satisfaction of its recording and highlighting capabilities. She remarked:

Video proved to be the means that would enable me to burrow deeper into human consciousness. After creating my first single channel video, I knew I was immersed in purgatory, but I could see how the medium worked like a magnifying glass, illuminating human consciousness as it streamed through daily life.<sup>18</sup>

She combines benign and unrelated images in *Amygdala* to create a sensate portrait of the possibility and oppressiveness of the open-endedness of memory. Louie's depiction of the scope of scenes recall the expansiveness of the mind's eye. The traumatized brain rewires because it has to navigate around and through the anxiety, fear, or terror of past negative experiences. Much as the video can be replayed, so the agonizing memory is triggered and the mind recalls the gruesomeness of past events which is often felt bodily or results in anxious or phobic responses or both. Within Louie's compositional structure, the repetition of the space of the forest and its recurrence suggests the persistence of certain memories, surrounded by positive, negative, and neutral associations.

Louie probes over the surface and then into the brain, contrasting the body's networked system to that of trees in the forest and natural meteorological effects with scenes of caution and lethality. French phenomenologist Gaston Bachelard commented on the

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<sup>17</sup> The team of participants included: Narration: Bettina Lamprecht, Music: Seth Simon, Audio Engineering: Nico Berthold, and Audio Advisement: Gen Rubin.

<sup>18</sup> E-mail to author from artist, June 9, 2014.

relationship between actual and psychic space as that of immensity becoming a kind of daydream with all its infinite possibilities, limited only by the imagination of the dreamer. Such imaginings convey what Bachelard terms “the consciousness of enlargement” where the protagonist is able to engage in chimerical meditation.<sup>19</sup>

## RANU MUKHERJEE

In four hybrid films by Ranu Mukerjee—*Ecstatic Picture, spilled milk* of 2011 (5:03 minutes) consists of an ecstatic picture and spilled milk; *Nearing and Viewing* of 2012 (6:39 minutes loop) is made up of images of bees, bee house, store front, lingham-yoni, roses, cash register, iPad, arctic campion flowers, purple mound, solar panels, honeycomb, wild pig, incense, bricks, jaguar, static, hands, honey, water, mop, stairwell, macaws, lemurs, churro sheep, temple zoo, chimera; *Radiant Chromosphere (move towards what is approaching)* of 2012 (4:59 minutes loop), fields awaiting development, grafted orchard, lemons, plums, cherries, pears, grapes, peaches, solar panels, gazebos, Old Almaden house, winery porch, Sindhi book, rice, incense, bricks, dancer’s dress, Ganesha object, snake charms basket, espresso cup, dish rack on table, sleeve, purse, treatment table, iPad, awning, museum bricks, honeycomb, macaws, California pepper tree, turtle, light, color, space weather; and *Xeno-real* of 2013 (5:10 minute loop) is comprised of a high desert, body noise, fashion models, protesters, service dogs, undead, Calcutta Art Studio, 19th century sun, and dust—the artist explores the lived experience as fantasy, conveying details through historical and contemporary ethnographic details of western and eastern societies. She calls these computer-based works “hybrid films” because of the multitude of objects within each, which the viewer reads as situations because of the linear progression of the film. In the medium listing for each film, she catalogs the array of referents and objects. These lists are incomplete, because there is an impressive number of situations in each hybrid film. In *Xeno-real* as one example, the artist takes the viewer through a set of metrological effects that sweep the landscape and adds objects and places with each pass. That is the briefest estimation of what she has occurring in the unfolding of her visuals. Through her imagery stratification, Mukherjee emphasizes disconnection, connection, layering, blanketing, camouflaging and encasement. Her physiography is one of convergence, wherein the viewer ceases to grasp the digital and non-digital realms. The artist has abandoned singularity in favor siting her imagery in multiple spheres where the social merges with the material. The visual pathways in her work shows how the digital permits her to abandon specificity in the imaging of physical location and objects.

Instead the artist uses the electronic to transform the intermingling and converging of realms, societies, cultures, imaginations,

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<sup>19</sup> Gaston Bachelard, *The Poetics of Space: The Classic Look at How We Experience Intimate Places*, Translated from the French by Maria Jolas with a new Foreword by John R. Stilgoe (Boston: Beacon Press, 1994), 184.

and realities. In these films, the individual forms are mostly of recognizable objects recontextualized into new relationships, which often collapse or otherwise reshapes and refashions experience so they now imbricate in impossible ways. The public is merged with the private and the past is merged with the present—separation no longer exists in Mukherjee’s works. The hybridity becomes a metaphor for individual and collective memory and communication which have accelerated considerably with the digital revolution.

This quickening happens at the expense of reflection and (sometimes) common sense on the micro level of the individual or family and the macro level of the nation or culture. The merging of these divergent elements in muddled levels, often so dense as to obscure meaning or individualism. The nomadic and itinerate domains radiate outward in Mukherjee’s surreal reorganization of rationality and physicality into the imagined and immaterial.

The artist leaves some of her processes of production in evidence with the focus on the two-dimensionality of the images within her films. The artist termed this aspect “making the construction visible.”<sup>20</sup> This flattening conveys a transience and a fleeting notion of the real. While the conjunction of these seemingly infinite objects and spaces opens up possibility, the artist uses the overflowing stage of her work to present abundance and deficiency simultaneously—an apt metaphor for the circulation of knowledge and communication during the trade and transmission of digital culture.

There is never a pause in Mukherjee’s hallucinatory spaces. A remnant of her past background in sampling, she willingly creates patterned jumbles that have a logic when she coheres her objects and settings together. She has elided intimate and immense into singular geographic sites or amalgamated personal perspectives. She intermingles and co-mingles the desert, forest, paradise, cities, arenas, furniture, body parts. It is a similar visual ride to the progressive and regressive slide between the macro and micro in the documentary short film *Powers of Ten* of 1977 by Charles and Ray Eames.

## MARY BATES NEUBAUER

Mary Bates Neubauer uses data to create 2D and 3D shapes, such as those seen in *Data Streams Series*. This group of six framed prints showcase geometric, simplified forms resulting from her manipulation of information to realize images. Using long streams of data about everything from local events to geophysical phenomena, she crafts screen-view renderings or produces

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<sup>20</sup> E-mail from artist to author, June 16, 2014.

sculpture from 3D computer files into rapid prototypes. Whereas data usually looks mundane and infinitesimal except to the mathematics researcher, Neubauer uses it as the basis for her aesthetic and in the service of her artistic vision. Numbers come alive and take form in her work. She sees within data the recording of cycles over time in a visual way. Usually it is hidden from view, which the artist confounds and puts on display as the underlying scaffolding for her art making it visually accessible.

One of the fascinating aspects of her work is that she translates mechanistic processes (the perusal and consumption of data) into expressive structures. Contemporary society has a fetish for information as a resource, which she then translates into objects and visages of the evocative or the beautiful. She notes that “information processes are not intuiting.”<sup>21</sup> As such, she manipulates them in such a way that she can intersect the empirical lexicon into original configurations. With all the instruments available to collect, store, and interpret data, it almost dominates our existence being inescapable from our daily lives where we digest varied numerical bits into framing elements for our lives. These objects do not necessarily have any relation to the data and usually the resulting images are non-referential. Interestingly, only certain data streams result in clear patterns to translate into art. To add to the mystery of her imagery, the artist uses an unreal palette, often marked by highly saturated colors and occasionally, bordering on fluorescence. Neubauer said that data about diabetes came out chaotic and data about a corporation was disruptive and not whole. The viewer can study each piece and usually see some kind of natural object, such as pods or shells. But her data streams rely on the patterns, which the artist then transforms into sculptural. Through these works she shows us the intangible in real space and time as objects. She is visualizing the scientific and technical through her imagination—by her selection of scale, surface, and color, among other features.

Steeped in the modernist traditions, Neubauer has to have a final product with a physicality so she translates information specifics into the real (either in 2D or 3D). In contrast to many artists using computer-based media in their process, she wants her hand in evidence, an outcome of her training in metal and ceramics. Also, she accomplishes the visualization of “a kind of synaesthesia between numbers and geometry,” a nod to her modernist sensibility wherein the vast realm of art contains within it utopian worlds apart from current times.

There is a serenity to Neubauer’s print and sculpted works. Seeing the real based upon the manipulated quasi-scientific material unexpectedly conveys a kind of sensuousness, such as one experiences in touching something worn like old wood. The artist crafts structures and configurations with ultra-fine surfaces. Some are extremely smooth, while others are textured with irregularities across the object’s profile. After looking at several of her different groups of works, they begin to resemble little fetishes or toys or playground structures—anything that might have some fun or desire attached to it. The anonymity of her

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<sup>21</sup> E-mail to author from artist, August 11, 2014.

objects, with absent legacies being pulled whole cloth from the numerical data stream has a kind of soothing rhythm to it, much like a harmonious and concurrent musical composition. That she's able to realize such finish without referencing industrially-produced objects is an impressive feat, given that her process in many ways resembles automated mass production because of her reliance on the data for the blueprint of the work.

## MARIE SIVAK

Marie Sivak's two sculptural installations are amalgamations of carved stone which she then enlivens through the insertion of internal video projections visible through the nearly transparent stone. *Aftermath* of 2009-2011 is video, a carved stone, and steel sculpture and *Vicious* of 2012 is carved stone, video, aluminum plate, and rare earth magnets sculpture. The contrast of the static mass of the stone, even when it is carved into a thin veneer, with the spectacle of the video projection creates a transitory sense to the surface and to the meaning of the sculpture as a whole. In each the video has the effect of enlivening the sculpture's appearance with an ephemeral aspect. We look at this solid mass of marble and yet it is in a state of flux with the passage of the video over time. It is a wicked sort of inversion, given the long art historical tradition of marble as the medium for permanency in sculpture. In contrast, video has a more recent history, heavily steeped by the viewer because of its associations with television and film, to function as a quick conveyance of meaning, whether its narrative is linear or non-linear. Because of the intricate challenges and technical virtuosity involved in carving marble, the artist may make rapid, split-second choices in rendering the surface, but sculpting it is largely an intentional and purposeful act. In contrast, video is much less expensive a material and much more forgiving of the artist who wants to make small changes along the way. Converging the less spontaneous handmade material and the more spontaneous—relatively speaking—mechanical medium affirms the presence of each and the meaning each conveys separately and together.

In *Aftermath*, a white small-scale marble bed with pillow and rumpled blanket are mounted on a steel bed frame. As the viewer approaches the piece, the motion of the video draws one in closer where a woman's head is seen lying down on the pillow. In one sense, the title here tells of the repercussions and consequences when a love affair ends. The individual no longer the beloved is now left alone to make sense of the final separation. A more tragic level to this piece is the suggestion that this small bed is a child's bed and the bed does not have an actual figure, only the one implied by the image in the video. This scenario could be one of the lost child or it could be that this bed was the site of violence. The marble here has the impact of permanence since it is the material so often used in mausoleums and crypts. The contrast between the solemnity and certitude of the marble speaks to significant themes, such as love, violence, or death. And it is impossible to look at a rumpled bed in a sculptural

installation without recalling British artist Tracy Emin's scandalous *Bed* of 1999 constructed out of the stained, messy, and flagrant props in the life of the party girl. Sivak's sculpture reads as comparatively more solid with a much more solemn mood.

*Vicious* has a multitude of elements by comparison. A scattered array of varying shaped limestone, marble, and travertine envelopes surround a video projection at the center. The envelopes look as if they have been thrown aside resulting in the splayed arrangement or a wind has blown them in different resting places. There are no letters on the envelopes, but in the video, a hand moves and manipulates small letters, caressing some and shifting others. The video is seen through a three inch thick block of stone with naturally occurring fiber optics with areas of opaqueness, which adds an obscuring element to the video's narrative. It is a dream or memory world and is not as sharply focused as the clarity one would experience in the world of empirical observation. The actual words or message of the letters in the video is unclear. In combination with the envelopes and the title, the narrative here is one of decision-making about language. Who decides what to write, who decides how it will be received? What if the interpretation diverges from the intention? What if the words have preconceived, conscious referents or what if they are arbitrary? Is a symbol clearly understood? The title suggests that this stack of envelopes is a pile of love letters gone astray after an affair ends. The brutality of the harsh word, as suggested by the title, wounds the lover more than correspondence between acquaintances. The confounding arrangement and re-arrangement of the letters by the woman's hand in the video extends the idea that language is not inherently transparent, being laden with cultural, psychological, and personal content.

## **CAMILLE UTTERBACK**

In her generative animations *Fluid Studies* of 2013 (1:57 minutes), Camille Utterback has created video paintings on two screens which resemble layered abstract paintings with a delicate palette of moderately saturated and nearly translucent forms that glide, float, or land within a broad space. This modest set of animations has an intense level of pleasure associated with it, much the same as glimpsing the utopianist modernist non-objective painting referencing nothing beyond its borders. Such a distinction separates Utterback's images from the real, even as the title and sub-titles tell the viewer that the relatively slow movement or stillness of the forms within the animation depend upon the viscosity of the "fluid" represented in each. The sumptuous treatments of the passage of water are aesthetically-appealing. Connecting the body's ability to make marks and render a surface in digital animation is a new kind of conceptual approach to visual imagery.

Utterback's *Fluid Studies* set the entire scene in front of the viewer. The forms within the animation move at a slow pace,

delaying reflection and allowing for meditation. The viewing process enables slow consumption and gradual discovery, challenging the viewer to look and move in a prolonged way. The objects and forms float within the space of the animation. The motion is lively in a deliberate manner and not static. The viewer can absorb all the details with such in-depth scanning. The emphasis is on stillness and quietude. They are a remedy to the disruption and activity of modern life and the usual accelerated pace of digitized communication. The subtlety of the images in the animation convey stillness and calm. The painterly simplicity, the range and variety of tones, and the dissimilar treatment of the forms within the composition recalls *Six Permissions*, the famed thirteenth century Chinese ink on paper painting. Utterback's composition is arranged asymmetrically and the objects progress in disparate and divergent rhythms.

## **ADRIANNE WORTZEL**

Beginning at the start of the 21st century, Adrienne Wortzel has had a successful career creating technologically-based work. The three works by which she is represented in this exhibition show the breadth of her interests in new technologies and virtual networks. Through her collaborations with scientists and technicians, she creates complicated installations which easily engage the viewer because of the clarity of her conceptualizations. These resulting works allow her to explore ways of knowing and story-telling traditions defined anew by computer-based media. There is an anecdotal layer of the work.

*Kiru (from Camouflage Town)* of 2001 is a networked robot installation, website, computers, and video camera, the viewer works remotely online to manipulate the movements and actions of "Kiru," a four-foot tall telerobotic that participated with exhibition visitors for one minute each and then broadcasts its environment to the internet. This work was first shown at *Data Dynamics* at the Whitney Museum of American Art, curated by Christiane Paul and on view from March 22 through June 10, 2001. Kiru's habitat is Camouflage Town, which is a pseudo-space for military practice and engagements. The diminutive stature of Kiru adds to his significance making him more accessible to the viewer since he is in the sub-dominant position and is smaller than life size. The viewer interacts with a robot who has a curmudgeonly collection of personalities, programmed as he is to offer unsolicited advice and opinions. It has five different roles: wizard, librarian of juxtapositions, philosopher, preacher, and storyteller. There is a sixth open-ended personality of a blank slate that floats freely in Kiru's psyche and occasionally percolates to the surface.

*Battle of the Pyramids* of 2008 consists of twenty-one toys repurposed into a miniature battalion, installed with video projection and endlessly re-enacting a military battle from a battle in 1798 between the French army under Napoleon Bonaparte and local

Egyptian tribal soldiers. Here Wortzel analogizes the military and entertainment complex through new technologies, making the relationship intimately clear. She used the popular mechanical Elmo doll and converted it from its cuddly identity to that of anonymous, (literally) mechanized soldier. She synched the figures using microcontrollers that move the arms in synchronized sequences and motions and to fall down and roll up to return to a standing pose. The call to arms here and the former playfulness of the diminutive robots is both shocking in its rigidity and obscurity and the gestures of the loving pretend toy now become rigid motions in battle or its re-enactment. Children's risky play, a biotechnological phenomenon that aids in a child's development, is here taken to an unusual end where the toy becomes the soldier in a clear alignment of defense and pretend. The video projection reads like a training film to aid strategists and soldiers for future engagement.

*Solace and Perpetuity, a life story* of 2015 is a book project. It consists of a group of 176 documents written by the artist over a period of twenty years. The reconfiguring of the linearity of the text has roots in an earlier hypermedia internet book *The Electronic Chronicles* of 1994-95. The document has been deconstructed and disordered using a computer algorithm so that the resulting text is always individualized and never the same as any other. The documents are randomized, making another layer of material for disorder in the situation of this work. Computer technologies make the processing of the wording into absolutely individual forms of her writing. The different guises of the work reminds of the many roles an individual adopts in life. It even becomes a metaphor for role-playing.

## **JANET ZWEIG**

Janet Zweig's *Professor Obsessive and His Two Compulsions* of 2004 (54 seconds) is a prototype for a public art work. It was intended as a didactic, instructional tool to inform the public about her idea for a more complex work later realized, installed, and placed on view in 2011 in modified form as *Pedestrian Drama* in Milwaukee, Wisconsin. For the final work, she collaborated with area writers and artists to add a local dimension to the piece once it was realized in final form, though the use of the flip-book form remains, the depicted dramas involve more characters. Zweig's similar flipping animation sculptural installations have appeared in train stations and airports; the traveler sees the anonymous figures as the mass, the public, the populace—in other words, the traveler. The flipping image has long been an analog way to convey transportation schedules in train stations and airports because it can be rapidly changed and can communicate details rapidly.

In this piece, Zweig uses obsolete technology as the basis for its image; specifically, she animates the flip book and then locates it within a conventional black stage (here a black box), which creates a kind of proscenium arch around the action framing it and,

thus, highlighting it. Invented in 1868, the flip book relies on persistence of vision so that the viewer experiences the illusion as continuous and successive. Combining animation, photographic images, and a mechanized version of the flip book, three figures move back and forth or slowly interact. On the left, there is a single bespectacled male figure who paces back and forth. On the right, there are two sections—approximately the same size as the left area, but these are divided in half, each containing a single female figure who faces the other and robes and disrobes her jacket before passing it onto the other figure.

The interactive component is that the viewer is supposed to “trip” the action via motion detector and get the flip book moving. The deterministic sequence of the path of the figures recalls the fascination of the automaton in whose repeated movements there are little bits of childish pleasure and amusement in watching the sequence played out and repeated. The viewer becomes immersed in the display of the situation, but is uncertain exactly what the unfolding drama indicates. The deterministic pattern of the professor and his two proteges interact but never fully converge in their paths seem like a funny little drama of misunderstanding or the inability to connect, the stuff of many romantic comedic novels and films where the figures try to relate but somehow always miss.

Because Zweig relies on the photographic image here, the voyeurism of the viewer in observing a private drama cinematically underlies the grammar of the figures’ motions and paths. It is technology, obsolete analog technology, as theater. The response environment tracks our movements while we track that of the figures. The concept is simple and straightforward. The fantasy is playful and engaging because we are in the know. We may not fully understand the scope of the intended narrative, but the viewer does not have to have sophisticated understanding of elaborate computing languages and schemes in order to peek in and engage in the literally unfolding scenario. Technology is one of the means or devices in Zweig’s toolkit. She noted that: “mechanical and digital devices have helped me to make work that is generative and to create dynamic experiences.”<sup>22</sup> The technology here is a means to end, giving the artist ways to engage the viewer while exploring the whimsical in the small interaction. The complexity is in the relation of the depicted characters. The viewer wonders what the psychological interplay is here, guided by the title to the relationship between the older male authority figure and his two much younger women devotees. In much technological work, the small encounter between people is lost in favor of big, splashy dramatic or violent action or in massive scale. Here, our attention is repeatedly drawn to such a human interaction and a small engagement to the point that we become fascinated by the situation without the glamour of the usual spectacle accompanying the use of technology.

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<sup>22</sup> E-mail to author from artist, June 23, 2014.



**2014 - 15 MARY H. DANA WOMEN ARTISTS SERIES  
EXHIBITION ARTISTS  
Statements and Images**

## **GRIMANESA AMORÓS / Statement**

**grimanesaamoros.com**

2014 -15 Estelle Lebowitz Visiting Artist in Residence

Grimanesa Amorós is a multidisciplinary artist with diverse interests in the fields of social history, scientific research, and critical theory, which have greatly influenced her work. Amorós is the recipient of several grants, which include the National Endowment for the Arts Visual Artist Fellowship - Washington DC, The Travel Grant Fund for Artists, and the NEA Arts International - New York, NY. She has exhibited, created public works, and participated in film festivals in the United States, Europe, Asia, and Latin America; among some of the recent are 125 Maiden Lane, New York, NY; La Fragua Tabacalera, Madrid, Spain; Georgian National Museum's National Gallery, Tbilisi, Georgia; CAFA Art Museum, Beijing, China, Harper's Bazaar Art / Art Basel HK, Hong Kong, China; CASAmerica, Madrid, Spain; INNOV8 Festival, Lafayette, LA.

Since childhood Amorós has been attracted to the abstract visual quality of landscapes – whether it is the procession of the terraced steps of such places as Machu Picchu or the patchwork patterns of the farmlands that she encountered while flying over Israel. The pure aesthetic of these manmade vistas stand out in stark contrast to the untouched quality of their environs. Seen from above, the individual circular fields reveal intricate and unique designs. The vastness of these landscapes move her, and Amorós found herself astounded by the amount of technology necessary for the creation of these landscape marvels.

Amorós researches the locations, histories, and communities of the installation sites of her public works and is inspired by Peru's history for her art but she does not hold an essentialist or nostalgic view of her subject. Her process remains organic and instinctive. This intuitive relationship to technology is a distinctive feature of her practice. Amorós's work incorporates elements from sculpture, video, lighting, and cutting edge technology to create site-specific installations that engage architecture and create community.

## GRIMANESA AMORÓS / Images



*Light Between the Islands #2, 2013*

LEDs, diffusive material, custom lighting sequence, electrical hardware  
6' 7" x 9' 6" x 1"

Images courtesy of the artist



Detail

Amorós uses innovative materials, LEDs, lighting programs, and video animation to illuminate the gallery space. The sculptural islands of shimmering white bubbles, rise upward and outward from the floor of the gallery to convey a sense of wonder and playfulness. The bubbles that form the islands are part of modular units and layers. Amorós multiplies and arranges the units into structures that can become monumental in scale and appear to be a solid mass; while at the same time appearing to be weightless, buoyant, and ethereal. As visitors walk around, they will encounter and react to its presence and magic of her beloved Uros Islands in Lake Titicaca.

## GRIMANESA AMORÓS / Images

*Miranda* mixes imagery of circuit boards, ancient Incan monuments, Incan sun masks, and an animation of the artist's face transformed by the lines of totora reeds. These images are then combined with video footage of waves forming seafoam washed up onto the Peruvian coastline, filmed between sunset and moonrise – for seven consecutive days, by the artist. Amoros shares with us the impressive and miraculous change in light from day to day, creating a sense of wonder. The name, 'Miranda' is a female given name derived from a Latin word meaning "to be admired".

*Miranda* demonstrates how the striving for resources has led us not only to the abyss of the social and political climate in regions such as the Middle East but also to impressive and innovative new technological environmental solutions. This work encourages viewers to reflect on the inestimable impact natural environments have on human history, underlining fundamental sources of conflict in many sparse outposts of civilization. It compels us to question what is "natural" by allowing a glimpse of the cryptic yet conspicuous signature we leave on the landscape of our planet.



*Miranda*, 2013

Video, 4:41 minutes

Soundtrack by Ivri Lider of the Young Professionals

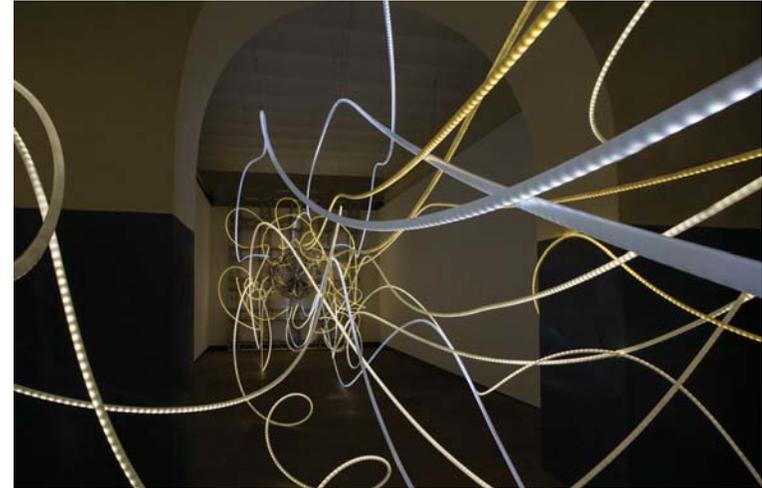
Images courtesy of the artist

## GRIMANESA AMORÓS / Images

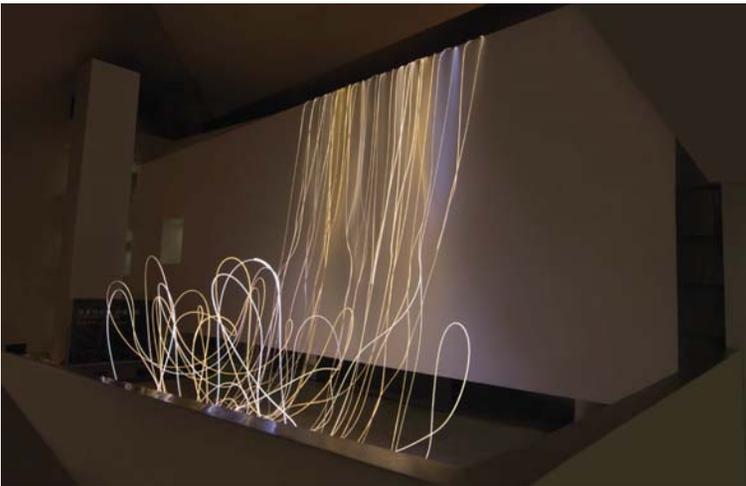
Installation documentations - Video and photographs



*Breathless Maiden Lane*, New York, NY, 2014



*Fortuna*, Madrid, Spain, 2013



*The Mirror Connection*, Beijing, China, 2013  
Images courtesy of the artist

## GRIMANESA AMORÓS / Images

Installation documentations - Video and photographs



*Racimo*, Turku, Finland, 2010



*Uros House*, Times Square, NY, 2014  
Images courtesy of the artist



Detail

## **EMILIA FORSTREUTER / Statement**

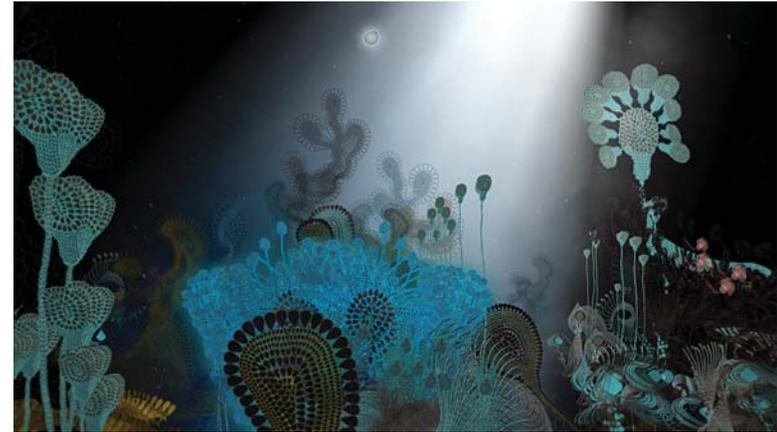
**emiliaforstreuter.de**

Emilia Forstreuter is a freelance graphic artist and motion designer based in Berlin. She studied Communications Design and Time Based Art at the Braunschweig University of Art in Germany and the University of Dundee in Scotland. Her work has been exhibited in London, Tokyo, Berlin, Miami, Paris, and several other places around the globe. She has received awards from the Cannes Silver Lion, ADC Europe Gold, ADC Germany Gold, among others.

Forstreuter's work focuses on creating immersive experiences and moments of intimacy by using graphic and motion design, and 2D/3D animation. She is interested in how one moment in time can be stretched and made to feel very dense and rich. She creates these moments and spaces through image, sound, and time by exploring the connection between visuals and sound - always in search of some sparkling moving moments. Forstreuter seeks to make things feel real and alive without being close to realism at all, and is interested in making the unfamiliar feel familiar.

The idea for the 2D/3D animation, *Yonder*, originates in the interest of the complexity and simplicity of the world we live in. Simply put, our complex world is created out of seemingly basic modules – cells – which are then repeated and combined to build up complex organisms and structures. This principle has been adopted in the creation of *Yonder*. By repeating and combining simple forms Forstreuter has built a world with its own shapes and organisms. The basic movements extracted from nature give the shapes a living feeling, creating an alternate world.

## EMILIA FORSTREUTER / Images



*Yonder*, 2009  
2D/3D Animation, 3:25 minutes  
Director, Designer, Animator: Emilia Forstreuter  
Sound Designer: Sam Spreckley  
Images courtesy of the artist

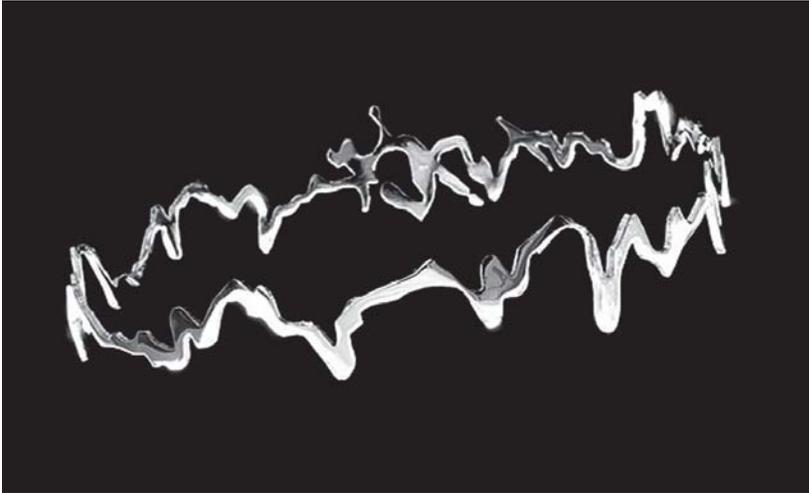
## JENNIFER HALL / Statement jenhall.org

Jennifer Hall is an artist who has been working with interactive media for over twenty-five years. She is experienced in a variety of media related forms, and is currently engaged in the re-focusing of biological material as an art medium. Hall is the Founding Director of the Do While Studio, a Boston-based, not-for-profit organization dedicated to the fusion of art, technology, and culture. She has received a Rappaport Prize, and many awards including the IBM Home Computing Award and the Woman of the Year Award from the Boston Chapter of the National Epilepsy Association. She is a Professor in the Art Education Department at Massachusetts College of Art and Design.

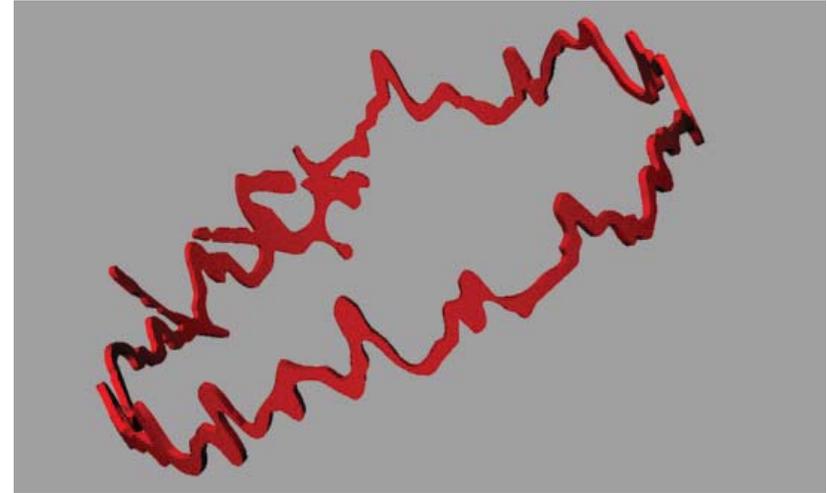
The origin of consciousness and its place in structuralism introspection's is to celebrate states of consciousness that makes up the numerous natures of mentality and the paradoxical state of the physical self, and is an important reason why Hall has chosen to work with her own seizures and the spiking data of her brain. The *Consciousness as a Property of Matter Series*, (sponsored by The Decordova Museum and Sculpture Park; the Rappaport family of Boston; the Clinical Neurophysiology; and the Electroencephalography Department, Beth Israel Hospital- Boston), is a project of digital renderings and sculptures by Hall focusing on Epileptiforms -- a term used by medical polysomnographers to describe the spiking that occurs within brainwave forms. The epileptiforms she has focused on are ones that are found during REM sleep -- a ninety-minute segment of deep sleep that occurs a number of times during each sleep cycle. These spikes take place in her brain where a more common dream baseline would usually be recorded. The collected data is then translated into a solid object through the 3D printing technology of rapid prototyping.

Certainly the type of electrochemical mapping found within the Temporal Lobe Epilepsy (TLE) experience is not new to the mammalian brain. Like many forms of new diagnostic technology, a definitive diagnosis exists only because we can observe it by electronic monitors. This places diagnosis less on how a person looks or acts and more on the electrical occurrence itself, hence a further objectification of the subjective nature of experience. Here, consciousness is most certainly a property of Matter -- that the succession of subjective states that we feel as a metaphysical self -- the solidity of matter, dissolves into mathematical relationships in space and then are re-formed as object separate from the source. Now disembodied, these "thoughts" are both physical and metaphorical.

## JENNIFER HALL / Images



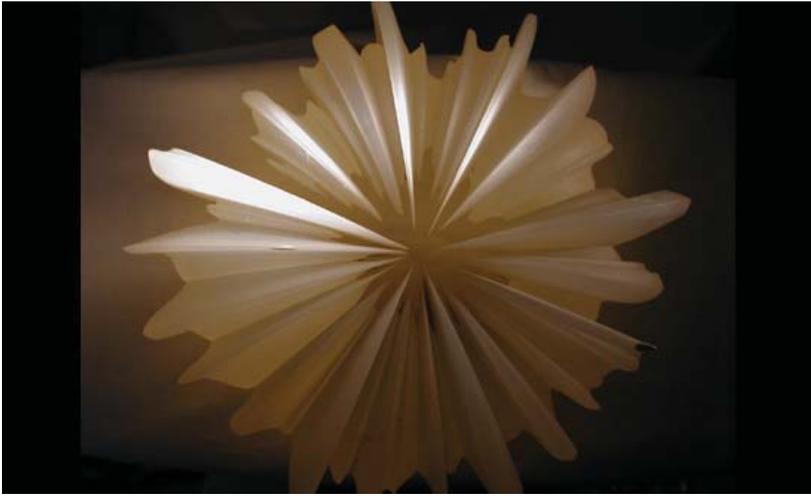
*Epileptiforms: 5 REM*  
(*Consciousness as a Property of Matter Series*), 2010  
Sterling silver, 12 x 12 x 1.5"  
Images courtesy of the artist



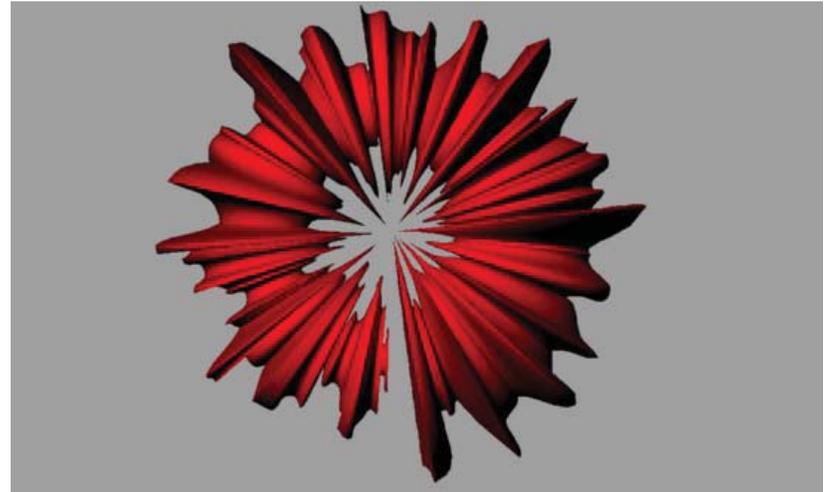
Digital Model

*Consciousness as a Property of Matter Series - Epileptiforms: 5 REM* and *Epileptiforms: REM Lathe* are works based on data samples from about 5 seconds of the artist's REM spikes. The data was grabbed during sleep, translated to a 2D vector graphic, slightly extruded and bent by 3D Nurbs software. The object begins at the electrical baseline of the first wave spike and then end at the same baseline of the last wave spike. It is considered one cycle, or a single epileptic event.

## JENNIFER HALL / Images



*Epileptiforms: REM Lathe*  
(*Consciousness as a Property of Matter Series*), 2012  
Polymer resin, 15 x 15 x 6"  
Images courtesy of the artist



Digital Model

## **CLAUDIA HART / Statement** **claudiahart.com**

Claudia Hart has been active as an artist, curator, and critic since 1988. She creates virtual representations that take the form of 3D imagery integrated into photography, multi-channel animation installations, performances, and sculptures using advanced production techniques such as Rapid Prototyping, CNC routing, and augmented-reality custom apps. She is an Associate Professor in the Department of Film, Video, New Media, and Animation at the School of the Art Institute of Chicago. Hart's works have been widely exhibited with galleries and museums, and collected by the Museum of Modern Art, the Metropolitan Museum of Modern Art, NY; and Museum of Contemporary Art, Berlin; among others.

Hart's work deals with issues of representation, the role of the computer in shifting contemporary values about identity and the real, and specifically questions ideas about what might be considered "natural". Her project is to feminize the masculinist culture of technology by interjecting emotional subjectivity into what is typically the overly-determined Cartesian world of digital design. Her work adapts the forms and software normally used to create 3D shooter games. It transposes discussions about digital technology and a critique of the media through a feminist lens. In the context of ideas about technology that has replaced nature by threatening to eclipse and permanently alter it, Hart argues that contemporary ideas about technology are not a rupture but a reflection of very conventional ways of thinking.

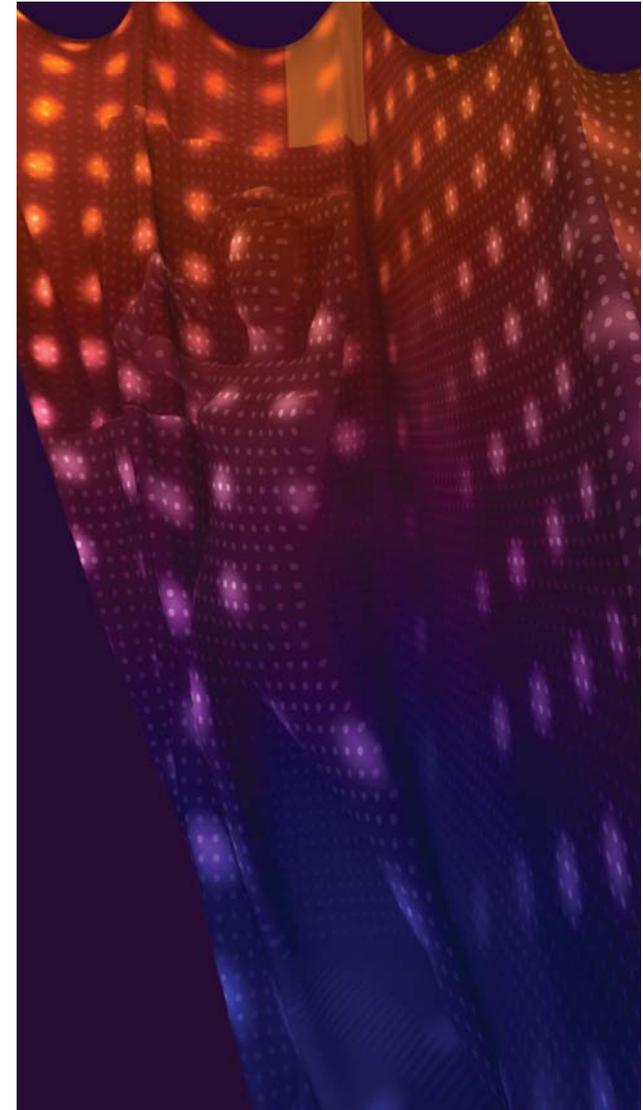
Technological culture is still functionally an all-male engineering culture - what the historian of technology David Noble has identified as "a world without woman". He describes the high-tech ethos as actually emerging from medieval Christian monasteries and describes it as still being driven by an unconscious millennial desire to recreate the world afresh, without women and outside of nature. In the absence of women, the masculine culture of technology, colored by what Noble has connected to Christian Millennialism, defines the impulse behind much of technological development, from atomic weaponry and space exploration to cybernetics and robotics. This impulse is one of both annihilation and of purification. Equally religious values pervade the technological research of the military / entertainment complex and influences its visual manifestations, particularly in relation to the body. An example of this is the typically hyper-erotic femme fatale populating mass-culture representations. By creating virtual images that are sensual but not pornographic within mechanized, clockwork depictions of the natural, Hart tries to subvert earlier dichotomies of woman and nature pitted against a civilized, "scientific" and masculine world of technology. In Hart's own way, she is staging a romantic rebellion against technocratic and bureaucratic culture.

## CLAUDIA HART / Images

*Optic Nude*, is inspired by a 1963 image of the same name by British photographer Jean Straker, known in the fifties for his erotic images of unconventional female beauties. His work was regularly confiscated by the British authorities, resulting in Straker becoming known as an activist who helped to change the censorship laws of his time. Hart has reconstructed Straker's photo and then used a variety of digital processes to layer different types of pulsating visual patterns over it, from strobing light simulations to the simulation of the motion of a curtain slowly fluttering in the breeze, then created a personal remix of chanting Buddhist monks as audio. The result is a version of trance-art that is techno-sublime: an attempt to imagine a digital space of disembodiment that is post-op, post-pop, post-human, post-pictures, post-capture, and post-photographic.



*Optic Nude*, 2013  
3D Animated video loop, 23:00 minutes, Edition 1 of 6, 1 AP  
Images courtesy of the artist and bitforms gallery, New York



**Yael Kanarek / Statement**  
**worldofawe.net**

Yael Kanarek's creative practice centers on the fundamental hypothesis that language and numerals render reality, and that this reality is an entirely subjective unified field. Through the shuffling of physical properties that construct our use of language (matter, shape, sound), Kanarek's work examines how verbal signifiers operate emotionally. Selected for the 2002 Whitney Biennial, exhibitions of Kanarek's work also include: The Drawing Center, New York; Beral Madra Contemporary Art, Istanbul; National Museum of Contemporary Art, Athens. She has received many grants, a Rockefeller New Media Fellowship, and an Eyebeam Center for Art and Technology Honorary Fellowship.

Employing modes of authorship such as storytelling and multilingualism, Kanarek manipulates the biographical predisposition of cultural associations. As an Israeli-American, Kanarek's perception is tempered by an awareness of post-national borderlines. She draws from the multilingual landscape of her childhood in Israel, where narrative (both ancient and modern) plays a dramatic role in defining people's lives. Kanarek's work enters spaces of meaning determined by a global network and the negotiation of identity that occurs when confronted with multiple systems. Crossing these sensibilities with her observation of the internet as a network made of language - natural and computer - her most recent projects document the consciousness shift from a Modernist self to that which is networked.

Kanarek's interest in the subject of time prompted her to design software that synchs video and audio with the computer clock. She has been integrating this interest in formalist aesthetic with the chaos of daily life into a growing body of these computational videos. A meditation on temporality, the computational video work *Clock: Jerusalem to Tel Aviv*, uses footage shot from the window of a taxi van and synchronizes the clips to an annual clock. Structured to reflect current time, the night landscape along Highway 1 changes subtly – keeping the viewer continuously on the road somewhere between the two cities. Likened to the idea of time travel, Kanarek poses a theoretical beginning in the ancient city, and an ending point in one that is modernized. Calling the half, three-quarter and full hours, time in this looping visual experience is marked by audio recordings of church bells, dogs, and crows.

## Yael Kanarek / Images



*Clock: Jerusalem to Tel Aviv, 2010*  
Custom software, computer, video display, dimensions variable  
Edition 1 of 6, 1AP  
Software: Yael Kanarek and Shawn Lawson  
Video documentation: [vimeopro.com/bitforms/kanarek/video/36149603](https://vimeopro.com/bitforms/kanarek/video/36149603)  
Images courtesy of the artist and bitforms gallery, New York



Detail

## JEANNETTE LOUIE / Statement jeannettelouie2.com

Jeannette Louie is a contemporary filmmaker and artist of Chinese descent who journeys into the dystopic diaspora of the human condition. Her films have screened at many venues inclusive of the Anthology Film Archives (NYC), National Gallery of Art (Washington DC), Platoon Kunsthalle (Berlin), Nerve Center (Derry), and Citizen Jane Film Festival (MO). She is the recipient of numerous awards and fellowships, and exhibitions of her artworks have appeared at [.Box] at Visual Container (Milan), Platform Seoul (South Korea), The Center for Photography at Woodstock (NY), among others.

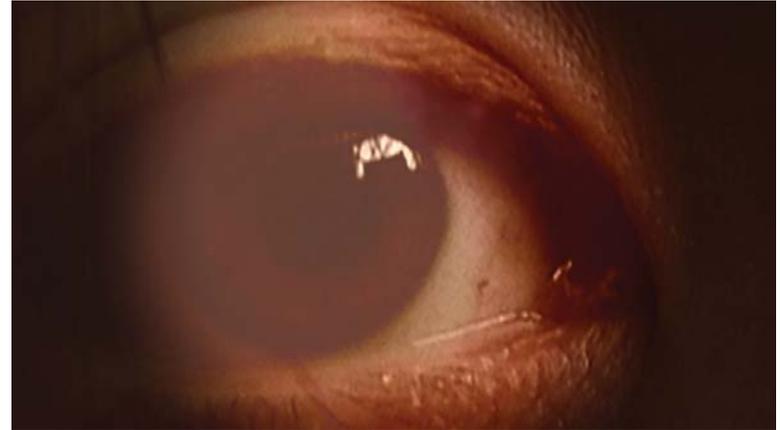
Creating a nexus between film, animation, photography and drawing, Louie's experimental films and installations depict the psycho-geographic terrain of the mind under duress. She has contemplated medical fallacy, mortality, and the activation of fear. She follows the relentless drive individuals have as they find a place for themselves within the inexplicable nature of human circumstance. Essentially, the films are aesthetic portraits of specific psychologies. These psychologies include the unrequited echo of memory (*The Making of Love*), the activation of fear (*Amygdala*), the endurance of chronic pain (*Sonia, Interlude*), the mediation of medical trauma (*Prelude, Peter*), and the animism of mortality (*Cadavers in the Trees*). There is an underlying theme that tethers all of the films to a humanistic interpretation of our bodies being turbulent diasporas where human consciousness is dispersed into this wasteland of unpredictable circumstance and where it repeatedly attempts to grasp some understanding of its predicament.

Louie is passionate about expanding the perceptual possibilities of narrative film, particularly of using its characteristics to inspire empathy and awareness of the psychological sciences. She wishes to probe deeply into the psychological realm to explore its cognitive hold over physiology and most important, elucidate its influence on the construction and destruction of identity. Is consciousness sentience? Do memories evoke consciousness? How does consciousness determine reality? What role does conscience play in consciousness? This inquiry is being examined through the lenses of the philosophical, the scientific, and the pathological. As she peers into the portal of subjectivity with these lenses, Louie senses the existence of an enduring sentience and the notion of unanimity, that a synaptic thread somehow links humans throughout time, history, and even evolution. She is attempting to locate this unnamed sense and illuminate it as a source of empowerment. In many ways, Louie is hoping to construct a modern perceptual space, one that could be considered a way station for those that are wandering about seeking comfort by the thought of returning to a place devoid of fear.

JEANNETTE LOUIE / Images



*Amygdala*, 2013  
Hybrid video, 10:09 minutes  
Images courtesy of the artist



## **RANU MUKHERJEE / Statement** **ranumukherjee.com**

Ranu Mukherjee is a multi-disciplinary artist who earned an MFA in painting from the Royal College of Art, London, and a BFA in painting and filmmaking from the Massachusetts College of Art, Boston. Her work is in the collections of the San Jose Museum of Art and the Kadist Foundation, and she has exhibited in national and international exhibitions, such as *Bay Area Now 6* (Yerba Buena Center for the Arts), and *GRAIN* (Gallery Espace, New Delhi). She is currently Assistant Chair of the MFA Program at California College of the Arts. Mukherjee was a foundational part of the collective *0(rphan)d(rift>)* drift in London, who made a manifest in 1994. They published the cyberpunk novel '*0(rphan)d(rift>)CYBERPOSITIVE*' in 1995 and received grants from the Arts Council of England and the London Arts Board to produce a major project with Beaconsfield Arts in 1999.

Mukherjee's hybrid films, textiles, works on paper, spatial installations, and performed projects probe ways that contemporary life is shaped by creolization and nomadism. Her work considers the construction of culture by these ongoing processes, from a neo-futurist perspective, often beginning with the speculative narratives shaping the present moment. Her work engages audiences through a hybrid and visibly crafted aesthetic. Mukherjee works with source material that crosses art historical trajectories, in the hope of encouraging broad recognition of the complex legacies that make up the urban environment. She is guided by the ambition to engender an expansive kind of bodily identification with a wide spectrum of organic matter and instigate a sense of time travel.

The artist uses the term 'Hybrid Film' to refer to her moving images works, and to call out both their formal and cultural basis. The films are created by composing photographic and animated source material into dynamic collage-like moving pictures. They are often silent and shown as looping projected video installations. The development of the films is organized around identifying and picturing specific evidences of intersecting ecological and cultural transformation, treating landscape as both a stage and an energetic body, and the film as the depiction of a geophysical event. They are developed through a process of finding and making source material through research, photography, social engagement, and painting. These elements come together in the making of the film, which is often shown in constellations with the pieces made for the film- i.e. paintings, printed textiles, and / or audio.

## RANU MUKHERJEE / Images



*Radiant Chromosphere*, 2012  
Hybrid film, 4:59 minutes  
Image courtesy of the artist



*Ecstatic Picture, spilled milk*, 2011  
Hybrid film, 5:03 minutes  
Image courtesy of the artist

## RANU MUKHERJEE / Images



*Nearing and Viewing*, 2012  
Hybrid film, 6:39 minutes  
Image courtesy of the artist



*Xeno Real*, 2013  
Hybrid film, 5:00 minutes  
Image courtesy of the artist

## **MARY BATES NEUBAUER / Statement** **[public.asu.edu/~mbates/](http://public.asu.edu/~mbates/)**

Mary Bates Neubauer has shown her work widely and has completed many public art projects in the western states, including interactive sculptural works. In the past 5 years, her sculptures and digital images have appeared in national and international exhibitions at galleries and museums in New York, Paris, Beijing, and Adelaide. Working at the intersection of art and science, she exhibits with organizations including Ars Mathematica and Art-Science Collaborations. She currently teaches at Arizona State University.

Neubauer's artistic processes focus on the hidden aspects of our surroundings, emphasizing artistic and tactile way of understanding global and metropolitan functions based on data visualization. New ways of seeing our natural and built environments are made possible through the dimensional, visually appealing expression of the many streams of numbers that constantly input from our environment. An expanded awareness of systems, cities, timelines, and the rhythms of the larger world is evoked. It is Neubauer's hope that these data-responsive images will serve as an aid to a more deeply felt understanding of the complex attributes of the environments in which we live today. Her work is designed to provide a highly visual interpretation of the behavior of data through time, while remaining true to the underlying input driving the visuals.

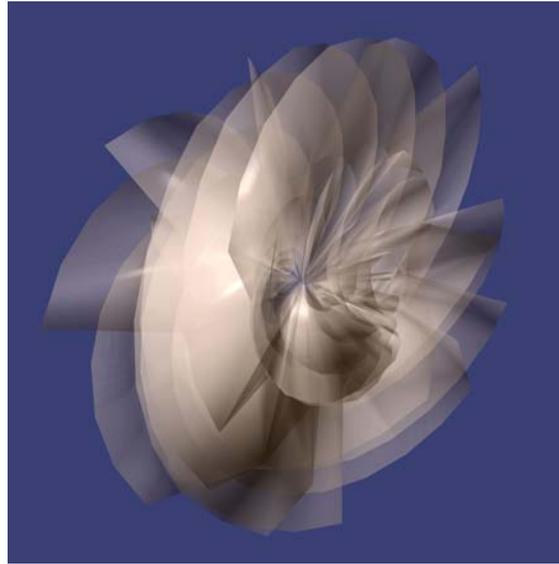
Neubauer has had the opportunity to work with municipalities, corporations, environmental agencies, individuals, and industries in a number of data visualization projects. She has dimensionally visualized rainfall and water usage, river and tidal flows, geophysics, environmental pollutants, decibel levels, metal stream variations, air traffic, pedestrian flow, solar storms, telecommunications data, and many other topics in an ongoing series of exhibitions and projects. Additionally, she has collaborated with media artist Todd Ingalls on sonification of data, and has completed several public art projects involving these data flow topics both individually and as part of a team. Her work allows her to engage directly with the community and interact with specialists from many different disciplines.

Her data visualization work has a broad capability for variation, and it responds to incoming data through textural variation, color, feeling, tone, and illumination. The work can be produced as 2D imagery, sculptural form, surface maps, animations, and responsive public art. She is developing visualizations that are accessible anywhere, and are adaptable to many new media, including websites and portable digital formats. Projections of the work allow viewers to travel around in an experiential way, through brightly colored numeric worlds and ongoing virtual flybys. 3D models and prototypes of the data make long-term cycles and variations tactile and tangible, while prints and renderings offer a more contemplative view. Neubauer's works are meant to express long-term patterns in global phenomena, enhance sensitivity to the invisibly functioning aspects of our surroundings, and offer an expanded definition of sculpture.

MARY BATES NEUBAUER / Images



*Global Positioning Anomalies*



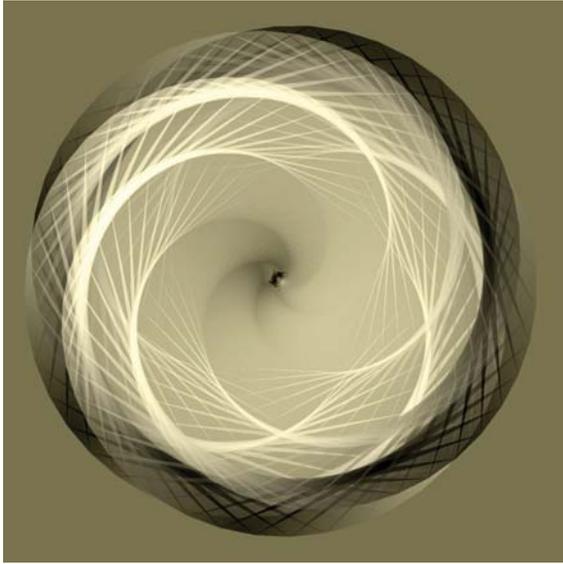
*Moonrise and Moonset*



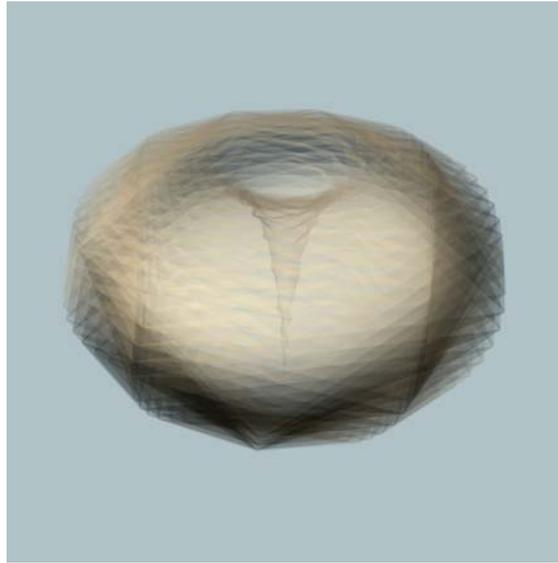
*Phoenix Average Temperatures 25 Years*

*Data Stream Series, 2004-05, Digital prints, 36 x 36" each, Images courtesy of the artist*

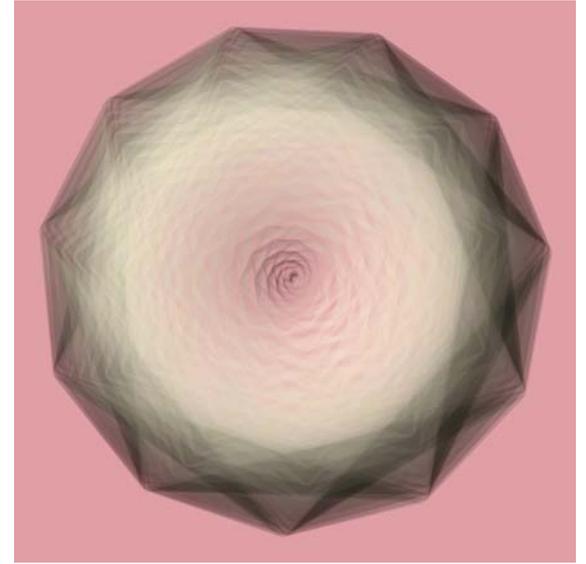
MARY BATES NEUBAUER / Images



*Monsoon II*



*Monsoon V*



*Monsoon IV*

*Data Stream Series*, 2005, Digital prints, 36 x 36" each, Images courtesy of the artist

## MARIE SIVAK / Statement

mariesivak.com

Marie Sivak's interdisciplinary work combines digital fabrication and video, with traditional stone carving and naturally occurring fiber-optics. Described as "Nam June Paik meets ancient Rome," the work meditates on the relationship between mind, body, language, and memory. Embracing the tension between the hand-made versus the technological, the work consequently explores the ways in which technology, media, and the screen impact language and the emotional terrain of human relationships in contemporary life. Her work has been shown nationally and internationally in Europe, Japan, and South America, and is in many collections including the Victoria and Albert Museum in London. She currently teaches in the sculpture program at Sylvania Campus, Portland Community College.

Traditional techniques, as well as digital tools such as 3D scanning, waterjet cutting, and CNC routing are part of Sivak's creative process. The most recent works focus on the expressive and conceptual potential of naturally occurring fiber-optics; embracing the tension between the hand made and the technological; and exploring ideas of intimacy, remoteness, language, memory, and the philosophy of being. While technology itself is not the sole focus of Sivak's work, she uses technology to reflect on these multiple subjects of interest.

About ten years ago Sivak began thinking of ways she could incorporate video within stone sculpture. A habit of playing around with different materials, technology, and a specific experience solidified her interest in this combination.

"One day, I was cleaning out the closet and came across a suitcase. When I opened it I felt a shock. I had forgotten that I kept some things belonging to my partner, who had died several years before. The suitcase unleashed a powerful set of memories, and emotions that made me realize the mind and body are not separate-- that Descartes really had it wrong. Maybe he didn't do much crying. That day I cried so hard it hurt. I ended up feeling pretty dehydrated and laughing at how absurd it was that an object could elicit such a reaction."

Sivak then carved a life size suitcase from a 900-pound boulder of alabaster and projected a montage of abstract and recognizable images that appeared and disappeared intermittently on the lid of the opened suitcase. The work titled *Pneuma* signifies "wind, breath, spirit" because the suitcase resuscitated her memory. *Pneuma* is the first major sculpture she completed combining video with alabaster, a translucent stone. When video is projected onto the stone the translucence mutes the imagery, creating the sense that it is emanating from within the stone. It is this specific juxtaposition of materials that suggest the Proustian moment when an object elicits a memory.

## MARIE SIVAK / Images



*Aftermath*, 2012, CNC machined and hand carved stone, video, 11 x 26 x 13.5"  
Images courtesy of the artist



Detail

The beauty and failure of language are an important focus especially in Sivak's more recent works. In *Aftermath*, a woman's face appears to be dreaming inside of a stone pillow. Letters are thrown randomly at her face like tiny projectiles, eventually becoming an overwhelming gale that nearly covers her entire face, becoming tangled in her hair. This piece and *Vicious* both explore a more treacherous aspect of language; language as a smokescreen or a manipulative game, as something tangible or visceral that lingers, but doesn't always make sense. In these works the video imagery is physically projecting from inside of the sculptures through three inch thick stone with fiber-optic properties. Fiber-optic technology is what makes high-speed communication via the internet possible; miles and miles of cables wind their way around the continents of the earth so we can enjoy efficient and immediate connectivity. Ironically, in Sivak's work the natural fiber-optic material allows the transmission of the image through the material but obscures and clouds the imagery, heightening the awareness that what we are experiencing is a magical illusion and a form of deception.

## MARIE SIVAK / Images



*Vicious*, 2012-2014  
Site-specific installation, Waterjet cut and hand carved  
stone, video, rare earth magnets  
Images courtesy of the artist



Detail

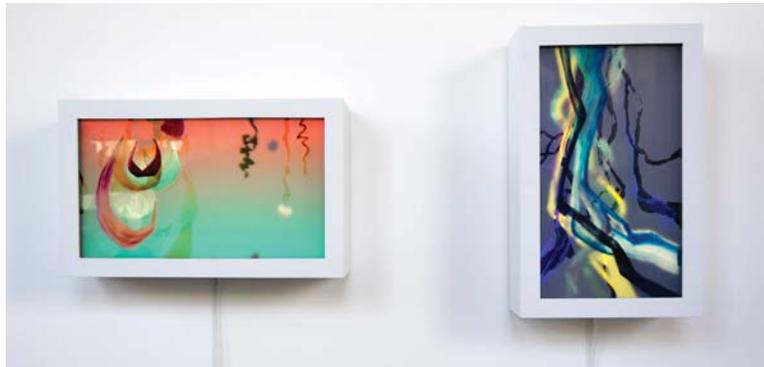
## **CAMILLE UTTERBACK / Statement** **camilleutterback.com**

Camille Utterback's work is an attempt to bridge the conceptual and the corporeal. How we use our bodies to create abstract symbolic systems, and how these systems (language for example) have reverberations on our physical self is a matter of great concern to her. The dialog between these two realms is the subject of both her traditional and interactive work, and it is particularly relevant to our contemporary culture as we aim to grapple with the ramifications of virtuality and our increasing relationship with the interfaces and representational systems of our machines. Utterback has exhibited across the US, has been the recipient of a MacArthur Foundation Fellowship, artist residences at the Pilchuck Glass School (Stanwood, WA) and Djerassi Resident Artists Program (Woodside, CA), and has had many commissions including *Flourish* at The Liberty Mutual Group in Boston, MA and *Span*, FOR-SITE Foundation in San Francisco, CA.

The interactive medium provides a rich environment to explore the connections between physical bodies and the myriad of representational systems possible in the digital realm. Physical-digital interfaces – ranging from the familiar mouse and keyboard to more unusual sensing systems – provide the connective tissue between our bodies and the codes represented in our machines. Utterback takes these interfaces as both a practical and conceptual artistic challenge. Utterback feels that interactive systems determine the grammar of our interaction with digital media, and ultimately its possibility for meaning.

By developing physical-digital systems that engage people's bodies instead of just their fingers and eyes, Utterback hopes to refocus attention on the embodied self in an increasingly mediated culture. Many of her interactive installations respond to participants locations in the installation space, to spatial relationships between participants, or to actual gestures and body language by using tracking software. She creates a visceral and an emotional connection between the real and the virtual; and Utterback questions and explores the space between the symbolic and the corporeal.

## CAMILLE UTTERBACK / Images



*Fluid Studies (Nodules and River)*, 2013  
TV, custom glass, mac mini, 12.5 x 20 x 5.5" each  
Images courtesy of the artist



The *Fluid Studies* are experiments, which combine dynamically generated animations and hand-glazed, sandblasted glass. These works create a tension between the unmoving elements of the glass, and the ever-changing animations. With these pieces, Utterback simultaneously exploits the subtlety of our depth perception (usually ignored by screen interfaces), and frustrates it – by obscuring certain areas of the screen with sandblasting.

**ADRIANNE WORTZEL / Statement**  
**adriannewortzel.com**

Adrienne Wortzel creates unique and innovative interactive web works, robotic and telerobotic installations, performance productions, dioramic objects, videos, prints, and writings. Wortzel has received support from the National Science Foundation, The Franklin Furnace Award for Performance, the Greenwall Foundation, the New York State Council on the Arts, the PSC-CUNY Research Foundation, among others. She is currently one of five artists chosen internationally to participate in the Scientists /Artists Research Collaborations (SARC) for creating works in collaboration with scientists at Los Alamos and Sandia National Laboratories in New Mexico, USA. Wortzel is a Professor at the New York City College of Technology, on the doctoral faculty of the City University of New York's Graduate Center, and an Adjunct Professor at The Cooper Union for the Advancement of Science and Art.

Wortzel's work explores historical and cultural perspectives by coupling fact and fiction via the use of new technologies in both physical and virtual networked environments. She collaborates with research scientists working in the fields of robotics and / or artificial intelligence both in the U.S. and internationally. Wortzel's work employs narratives nascent to technological research while examining comparatively the methodologies in order to point to its creative and intuitive nature built on an armature of empirical knowledge. The content examines, or displays, through fictive and dramatic scenarios, stories and scripts, aspects of how humans relate to machines.

## ADRIANNE WORTZEL / Images

*A Re-enactment of the Battle of the Pyramids* was a performance installation of reconfigured robotic toys performing seemingly military maneuvers in rigid choreographed formations. This art project explores and uses sensor and wireless communication to create clusters of entities moving in exact synchronization in response to a call to arms.

The soldiers originated as Elmo TMXs. They were stripped of their red furry coats and configured to perform military maneuvers emulating the rigid and postured Napoleonic nineteenth century fighting strategies. These strategies were particularly 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 French fought in their heavy and cumbersome uniforms in tremendous heat, in a regimen of traditional postures meant to vanquish Western armies, while the Mamelukes descended on them on horseback with scimitars, knives, and rifles.

The work is a testimony to the tragic consequences of imperialism and the dangers, follies, and sadness of a rationale for blind obedience that creates victims out of warriors.

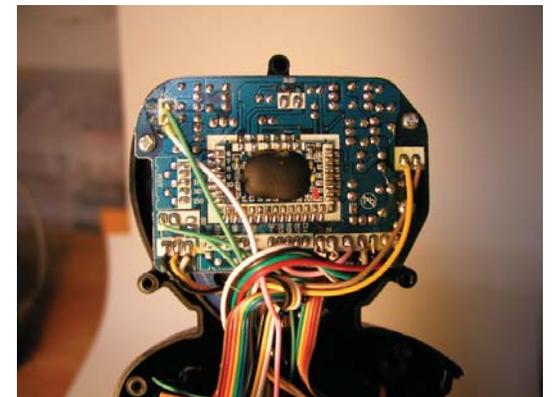
- Conceived, Produced, Directed, Written and Designed by Adrienne Wortzel. Initiated in the artist's residency at Eyebeam Center for Art and Technology, June-December 2008
- Funded by Eyebeam Art and Technology Center and the PSC-CUNY Research Foundation of the City University of New York, New York City College of Technology
- Performed March 3, 2009, *Theater of Code*, an evening of performance curated by Christiane Paul, at Light Industries, Brooklyn, New York.
- Electronics and Code Team: Mike Gazes, So Young Park, Jaymes Dec, Nick Wong  
Additional Design: Saki Soto

Elmo army poised for deployment in blue screen arena



*A Re-enactment of the Battle of the Pyramids*, 2009, Video documentation of performance, Elmos, 1:38 minutes / 12 x 5" Images courtesy of the artist

Inside Elmo's head



## ADRIANNE WORTZEL / Images



*Kiru / Camouflage Town*, 2001  
Interactive robot, video stream, 4.5 x 3'  
Image courtesy of the artist

*Kiru / Camouflage Town* creates a theatrical scenario for a robot that lives in the Museum space and interacts with visitors. The robot comments on its environment and transmits video streams to the world wide web, allowing remote visitors to communicate directly with visitors in the museum through the robot and control the robot's locomotion, pan, tilt, zoom of its camera and speak to museum visitors via text to speech. Atonomously, it plays the role of a "cultural curmudgeon," contextualizing the exhibition in terms of mapping physical/virtual space and physical/virtual identity. The robot's "personality" reflects its ability to be each visitor's avatar/alter ego, and his comments play on our willingness and capabilities to interact with a digital machine/character.

"Kiru is the Librarian of Juxatpositons in Camouflage Town. Camouflage Town is a decoy town constructed for the practice of military maneuvers, war, and other scenarios of high drama. During periods when the tribe feels invincible, Camouflage Town serves as the official battlefield to which it lures its enemies with rumors of new treasures and tools, keeping the real town intact."

Adrienne Wortzel: Conception, Author, Design (Virtual and Real), Producer, Director; Marcin Balicki: Robotics Engineer & Web/System Administrator; James Cole: Robotics Engineer and Robot Interface Software Design and Devleopment; Clilly Castiglia: Sound Design; Marc Antony Vose: ActionScript slinger; Noam Solomon: Server Programming for Telerobotics; Cesar A. Rodriguez: Design and Execution of Flash Movie for Robotic Controls; Orsolya Nagy: Web Design/Production; Ericson Mar: Technical Consultant; Chen-Yung Hsu: Software Engineer & Robotics Sound System Developer; Dr. Stan Wei: Robotics; Carl Weiman: Science Officer; Liz McGarrity: Costume Design; Steve Mittelman: Robot Voice

-Special Thanks to Christiane Paul, Glenn Phillips, Debbie Rowe, Jean Le Mee, Joel Mason, Andrew Franz Bennett, Aida Mysan; Stream hosting provided by ReallImpact; *Kiru* began with a robot designed and built by Activemedia Robotics (<http://www.activrobots.com/ROBOTS/peoplebot.htm>).

-Commissioned by the Whitney Museum of American Art, New York, and part of the exhibiton: *DATA DYNAMICS*, Curated by Christiane Paul (March 22 - June 10, 2001) (<http://www.camouflagetown.tv/>). Developed at The Cooper Union for the Advancement of Science and Art with a grant from the National Science Foundation (Grant No.DUE 9980873) and support from the NSF Gateway Engineering Education Coalition at Cooper Union. Restored in 2014 with funding from the Institute for Women and Art, Rutgers University; and The Cooper Union for the Advancement of Science and Art.

## **SOLACE AND PERPETUITY: a life story** by **Adrienne Wortzel**

“169-13. For measuring good against evil, the scale never shows the same result twice.”

### ***Here Be Fragments!***

This one-of-a-kind volume is an autobiographical work sourced solely from the author’s original primary sources. No memory or recall has been deployed to create the texts. Included are 176 documents arbitrarily chosen from writings spanning several decades. As in a medieval Book of hours, various genres are represented, including diaries, dreams, academic papers, fictive prose, poetry, plays and video and installation scripts. Each volume is unique in regard to the order of its content, as follows:

Documents were assigned a number in the order in which they were garnered from the author’s archives. Archives ranged in media from paper files through Cloud presence. Each document has been divided into its indigenous paragraphs, which, in turn, are numbered consecutively within each document. For example, if document 47 contains 8 paragraphs, numbers will be 47-1., 47-2., 47-3. Through 47-8. In cases where there is only one paragraph, it is still numbered, as in 47-1.

The paragraphs, as entities in their own right, become the modular units subjected to an algorithm, which scrambles their order. Each volume is a uniquely randomized autobiographical “novel” in an edition of one.

The algorithmic process allows the reader to dip into a life at any point in time and retrieve memories in an arbitrary order. If one reads and rereads the text, it sifts memories in the mind and maps categories of events, tenor, space and time. What happened “after” may be situated as “before”, resembling how memory behaves. Two people who read two different versions will find it difficult to discuss comparatively.

In this moment, where rich information is garnered down to the linguistic staccato of short forms such as flash fiction or 140 character tweets, meaning is compressed or stored in single or consecutive bursts of condensed text.

Randomizing texts allows the reader to comprehend single paragraphs as nodes inferring paths as their subtext, affording ventilation, depth and breadth. This type of kaleidoscopic reading can impart a more visceral understanding of the tenor of his or her life than the hierarchy of a logical order in the same it is accomplished in database cinema films built on non-linear or multiverse premises.

## ADRIANNE WORTZEL / Images

### *SOLACE AND PERPETUITY: a life story* **excerpt**

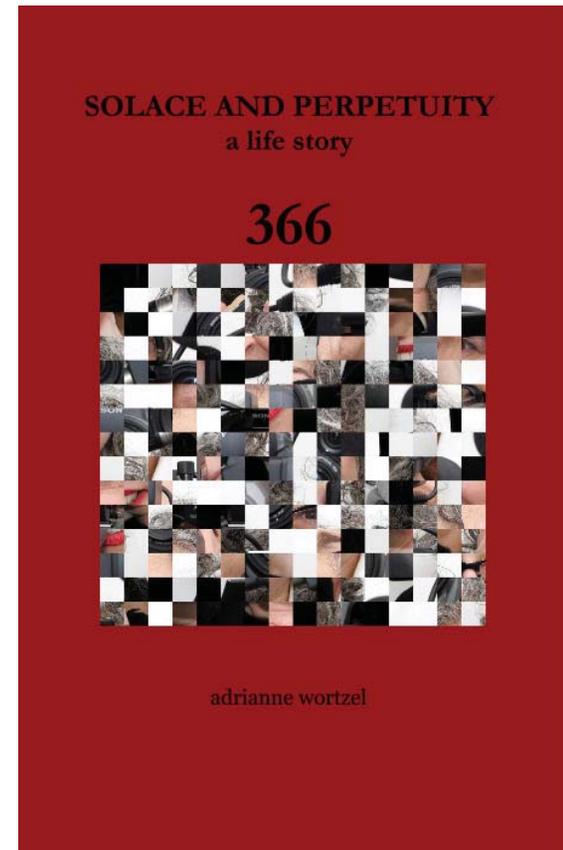
169-13. For measuring good against evil, the scale never shows the same result twice.

62-5. The Sequoia Tree started growing in the year 550 A.D., it has 1,342 rings and measures 16 feet 5 inches across, and weighs 9 tons. Its bark gets 4 feet thick. The seed that started the tree weighed 1/3,000 of an ounce, but the final tree can weigh 65 billion times that. At some point, something tells the tree to stop growing.

151-7. I try to make her understand that we must leave immediately. I know in my bones a tidal wave is coming, but she is so upset about the robbery she can't focus. I am heartbroken for her losses and, in the end, I can't bring myself to tell her about the tidal wave.

169-12. Upon discovery, there was a salmon caught in still water, deprived of velocity.

78-4. Mrs. McLuhan is a southern belle, beautiful, charming and wily. She lingers over details about the first time she ever saw Marshall—at a southern summer lawn party. He was wearing a white suit, and she thought he was very tall and handsome. She liked that he was very smart. He proposed. Her family objected. The primary objection was on the subject of religious differences between them, Marshall as Catholic, and Corinne's family as Episcopalian. The secondary objection was that his career as an academic would surely render their life together as one of abject poverty. They eloped. Her family promptly disowned her. I have no idea why she is telling me all this. This is very good wine.



*SOLACE AND PERPETUITY: a life story*  
Author: Adrienne Wortzel  
Text and image algorithms: Gabriel Ferrin  
Editor: Bridget McGeehan  
Publisher: Weil Press, New York, 2015  
Image courtesy of the artist

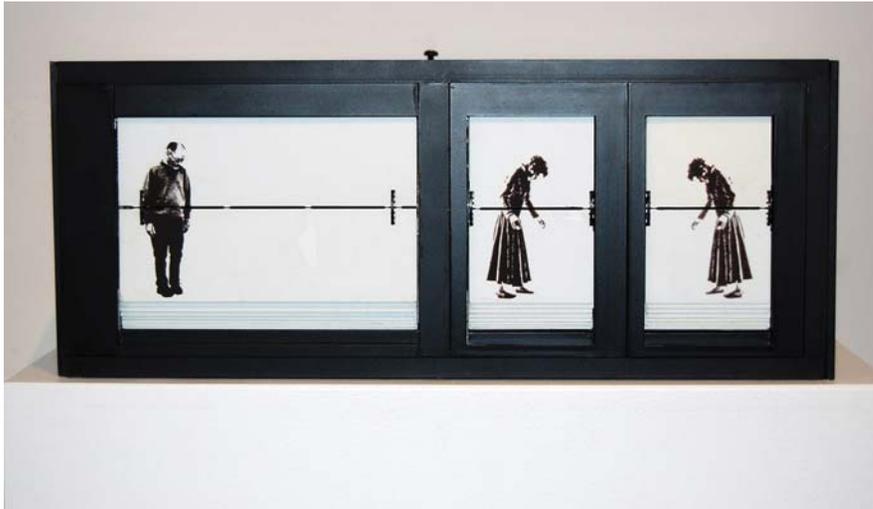
## **JANET ZWEIG / Statement**

janetzweig.com

Janet Zweig works primarily in the public realm. Her most recently installed public works include a performance space in a prairie on a Kansas City downtown green-roof, a series of kinetic works in Milwaukee, a generative sentence on a wall in downtown Columbus, a sentence-generating sculpture for an engineering school in Orlando, and a memorial in the lawn of Mellon Park in Pittsburgh. Other public works include a 1200' frieze at the Prince Street subway station in New York, and a system-wide interactive project for eleven Light Rail train stations in Minneapolis that incorporates the work of over a hundred Minnesotans. Her sculpture and books have been exhibited widely in such places as the Brooklyn Museum of Art, Exit Art, PS1 Museum, Walker Art Center, and Cooper Union. Awards include the Rome Prize Fellowship, NEA fellowships, and residencies at PS1 Museum and the MacDowell Colony. She teaches at the Rhode Island School of Design and at Brown University.

Zweig is best known for her kinetic sculptures, where she creates uneasy juxtapositions between the ancient and the modern, the mechanical and the emotional, the playful and the dead serious. Zweig's art symbolizes a continuous search to find the means for mind to control matter. Her work with electronic media began when she started writing simple programs to drive kinetic sculptures. In these works, the computer is a device that "thinks"—that is, permutes and writes—thus taking over a certain amount of creative control in the piece. Because of the combinatorial nature of some of the programs, the computer often comes up with surprising results, the effect of chance operations within set parameters. Zweig creates a structure that is both a physical sculpture and a computer program that drives it, and the active quality of their interaction lends the work an appearance of being alive. Once the machine is created, it works on its own, without Zweig's interference or assistance.

## JANET ZWEIG / Images



*Professor Obsessive and His Two Compulsions*, 2004  
Solari flap sign, photographic images, electronics, program  
25 x 22 x 24"  
Images courtesy of the artist



Detail

*Professor Obsessive and His Two Compulsions* is a prototype for a larger public sculpture. For this prototype, consecutive images are placed on a standard text flip-sign. This creates a cinematic sequence, like a flip-book, when the flap unit is triggered. In this case, a motion detector in the room triggers the three images of the flap unit to perform a sequence of events that make the images interact with each other.

The larger project was realized in 2011 with *Pedestrian Drama* in Milwaukee on East Wisconsin Avenue. Programming of the flap unit by Jon Meyer.

**MOMENTUM: WOMEN/ART/TECHNOLOGY**  
2014 - 15 Exhibition Artists / CVs

## **GRIMANESA AMORÓS / CV**

**grimanesaamoros.com**

Represented by Nina Menocal Gallery, Roma, Mexico; Epodium Gallery, Munich, Germany; Galerie Vernon, Prague, Czech Republic.

### **EDUCATION**

- 1985-88 The Art Students League (New York, NY)
- 1981-84 Private Ateliers (Lima, Peru)
- 1980-84 University of Peru, UNIFE (Lima, Peru)

### **SELECTED PUBLIC WORK**

- 2014 *Breathless Maiden Lane*, 125 Maiden Lane (New York, NY)
- 2013 *Fortuna*, Art Center Tabacalera (Madrid, Spain)  
*The Mirror Connection*, Museum of China Central Academy of Fine Arts (Beijing, China)  
*Golden Connection*, Harper's BAZAAR Art Night (Hong Kong, China)  
*Uros House*, The Lite Center (Lafayette, LA)

### **SELECTED SOLO EXHIBITIONS**

- 2013 *Light Between The Islands*, The Litvak Gallery (Tel Aviv, Israel)
- 2012 *Voyager Video Retrospective*, YUAN Space (Beijing, China)  
*A-part*, Contemporary Art Festival (Alpilles-Provence, France)  
*MoA Video Exhibition*, Seoul National University Museum of Art (Seoul, Korea)
- 2011 Paul and Lulu Hilliard Art Museum, University of Louisiana (Lafayette, Louisiana)

### **SELECTED AWARDS / GRANTS**

- 2011 Newark Municipal Council Cultural Award (Newark, NJ)
- 2005 X Tumi USA Award (Miami, FL)
- 2004 Centrum Arts, Residency (Port Townsend, WA)  
ARTspace Summer Artist-in-Residence (Raleigh, NC)

### **SELECTED GUEST LECTURER**

- 2014 TEDGlobal 2014, Speaker (Rio de Janeiro, Brazil)
- 2013 Washington University, Keynote speaker (St. Louis, MO)  
CASAmerica, Keynote speaker (Madrid, Spain)  
Georgian National Museum's National Gallery, "Miranda" (Tbilisi, Georgia)  
China Central Academy of Fine Arts, "The Mirror Connection" (Beijing, China)  
Sotheby's Institute of Art, (New York, NY)  
INNOV8 Festival, The Lite Center (Lafayette, Louisiana)

# EMILIA FORSTREUTER / CV

emiliaforstreuter.de

## EDUCATION

- 2009 Communication Design, Braunschweig University of Art (Braunschweig, Germany)
- 2007-09 Communication Design, Braunschweig University of Art (Braunschweig, Germany)
- 2005-06 Time Based Art, University of Dundee, Duncan of Jordanstone College of Art and Design (Dundee, Scotland)
- 2002-05 Communication Design, Braunschweig University of Art (Braunschweig, Germany)
- 2001-02 Architecture, Leibniz Universität Hannover (Hannover, Germany)

## SELECTED FESTIVALS / EXHIBITIONS

- 2014 *Denver Digerati Friday Flash* (Denver, CO)
- 2012 *Faux Images*, speaker (Berlin, Germany)
- 2011 *Gang of Berlin* (Berlin, Germany)  
*MOTA, CAPITAL, Berliner Buchstaben* (Berlin, Germany) and *Melbourne Animation Festival* (Melbourne, Australia)  
*London International Animation Festival* (London, UK)  
*Ybor Festival Of The Moving Image* (Tampa, FL)  
*Lichtströme, BUGA* (Koblenz, Germany)  
*Direktorenhaus* (Berlin, Germany)
- 2010 *8th International Biennial Santa Fe*, Invited (Santa Fe, CA)  
*Austin Museum of Digital Art*, Invited (Austin, TX)  
*Rome Independent Film Festival (RIFF)*, Official Selection (Rome, Italy)  
*The Nemo Festival*, Invited (Paris, France)  
*VIDEOFORMES*, Official Selection (Clermont-Ferrand, France)  
*Athens Video Art Festival*, Invited (Athen, Greece)  
*Cinedesign* (Recife, Brazil)

## SELECTED AWARDS

- 2011 *Cannes Lions*, Silver Design Lion (London, UK)  
*Art Directors Club of Europe*, Europe Gold (Barcelona, Spain)  
*Art Directors Club of Germany*, Gold (Berlin, Germany)  
*European Design Award*, Bronze (Athens, Greece)  
*Design Europe*, Crystal (Athens, Greece)
- 2010 *Art Directors Club of Germany*, Distinction (Berlin, Germany)  
*Output*, Output Award (Amsterdam, Netherlands)  
*Southern Comfort Creative Exchange*, First Prize (New Orleans, LA)
- 2009 *Renderyard Short Film Festival London*, Best Animation (London, UK)

# JENNIFER HALL / CV

jenhall.org

## EDUCATION

ABD PhD, Institute for Doctoral Studies in the Visual Arts (Portsmouth, ME)  
1986 MS ViS, Center for Advanced Visual Studies, Massachusetts Institute of Technology (Cambridge, MA)

## SELECTED ACADEMIC EXPERIENCE

1988-present Professor and Graduate Programs Coordinator, Department of Art Education, Massachusetts College of Art and Design (Boston, MA)

## SELECTED EXHIBITIONS / INSTALLATIONS

2009, 2010 *Slow Wave: Seeing Sleep Show*, EMPAC Rensselaer (Troy, NY); Axiom Gallery (Boston, MA)  
2008 *The Politics of Resolution: Interactive Mapping*, Shian Kan Preserve (Mexico)  
2000, 2007 *Acupuncture for Temporal Fruit*, Decordova Museum & Sculpture Park (Lincoln, MA); Montserrat College of Art (Beverly, MA)  
2006 *Tipping Point: Health Narratives from the South End*, Collaborative Installation, Thorne-Sagendorph Gallery, Keene State College (Keene, NH); Boston Center for the Arts, Mills Gallery (Boston, MA)  
*Epileptiforms: Diagnostic Arts*, Danforth Museum of Art (Framingham, MA); Massachusetts School of Pharmacy and Allied Health Sciences (Boston, MA)

## SELECTED LECTURES / PRESENTATIONS

2014 *Post Body Body*, Beverly Philosophy Association (Beverly, MA)  
2013 *Neuroaesthetics*, Beverly Philosophy Association (Beverly MA)  
2011 *A Post Human Aesthetic*, Harvard School of Medicine (Boston, MA)  
2010 *The Artist Researcher*, Panel (Baltimore, MD)  
2009 *Aesthetics of Consciousness*, Consciousness Conference (Tempe, AZ)  
2009 *Neurophenology*, Lesley University (Cambridge, MA)  
2008 *Bio Art*, Harvard School of Medicine (Boston, MA)  
2006 *Tipping Point: Health Narratives from the South End*, WCA (Boston, MA)

## SELECTED PUBLICATIONS

2015 "Autopoietic Aesthetic as a Lens for Interactive Art" (chapter), *Aesthetics and the Embodied Mind*, ed. Alfonsina Scarinzi (Düsseldorf, Germany: Springer Verlag).  
2008 "The Tipping Point Health Narratives from the South End" (chapter), *BLAZE*, eds. Karen Frostig and Kathy A. Halamka (Newcastle, UK: Cambridge Scholars Publishing).  
2003 "The Community of Do While Studio" (chapter), *Women, Art & Technology*, ed. Judy Malloy (Cambridge, MA: MIT Press).

## CLAUDIA HART / CV

[claudiahart.com](http://claudiahart.com)

Represented by bitforms gallery, New York, NY.

### EDUCATION

- 1984 MS, Columbia University Graduate School of Architecture (New York, NY)  
1978 BA, New York University, Art History, Summa Cum Laude, Founder's Award (New York, NY)

### SELECTED ACADEMIC EXPERIENCE

- 2007-present Associate Professor: Film, Video, New Media and Animation, School of the Art Institute of Chicago (Chicago, IL)  
2007-03 Visiting Digital Artist, Sarah Lawrence College (Bronxville, NY)  
2003-02 Visiting Digital Artist, Rensselaer Polytechnic University, Rensselaer (Troy, NY)  
2001-06 Associate Adjunct Professor, Pratt Institute (Brooklyn, NY)

### SELECTED SOLO EXHIBITIONS

- 2014 *The New Museum Store Presents: Welcome to Alice's Giftshop*, The New Museum (New York, NY)  
*Welcome to Alice's Giftshop*, bitforms gallery (New York, NY)  
*The Alices (Walking): A Sculptural Opera in One Act*, produced by Eyebeam and the Moving Image Art Fair, Eyebeam Center for Art and Technology (New York, NY)  
2013 *Rendering Time: Claudia Hart + Alex Lee*, Gallery Dos (Seoul, Korea)  
*There's a Body on the Screen: Claudia Hart with music by Edmund Campion*, Kurt Hentschlagler, Yefeng Wang, Museum of Luxun Academy of Art (Shen Yang, China)

### SELECTED GROUP EXHIBITIONS

- 2014 *Coded After Lovelace*, Hannah Maclure Centre at the University of Abertay (Dundee, Scotland)  
*Women in Digital*, The Hospital Club (London, England)  
*Art Silicon Valley* (Art Fair), Baker / Sponder Gallery (San Francisco, CA)  
*Faculty Projects: Claudia Hart, Anke Loh, Lou Mallozzi, Helen Maria Nugent, Carolyn Ottmers, Roxie Tremonto, and Andrew S. Yang*, Sullivan Galleries, School of the Art Institute of Chicago (Chicago, IL)  
*Coded After Lovelace*, Whitebox (New York, NY)  
*Off-The-Grid* (artist residency on Governors Island), Building 15 (New York, NY)  
*Synthetisch Vernünftig*, xLEAPx (Berlin, Germany)  
*Cloud Makers and Open Tech*, MakerLabs, (Vancouver, Canada)  
*The New Romantics*, The Eyebeam Center for Art + Technology (New York, NY)  
*Hi Res: Hilary Pecis, Claudia Hart, Clement Valla and Erik Berglin*, Plug Projects (Kansas City, MO)  
*High Lure Image Content*, Kappa Theta Phi (Richmond, VA)  
*Annual Showcase*, Eyebeam Center for Art and Technology (New York, NY)  
*Teutloff Collection meets Sandra Vásquez de la Horra*, Kunsthaus Lempertz (Cologne, Germany)

## Yael Kanarek / CV

[worldofawe.net](http://worldofawe.net)

Represented by bitforms gallery, New York, NY.

### EDUCATION

- 2007 MFA, iEAR, Rensselaer Polytechnic Institute (Troy, NY)
- 1993 BFA, Empire State College, SUNY (Saratoga Springs, NY)

### SELECTED GRANTS / COMMISSIONS / RESIDENCIES

- 2011 Civitella Ranieri Fellowship (Umbria, Italy)
- 2009 Mamuta Artist in Residence (Jerusalem, Israel)
- 2007 Eyebeam Center for Art and Technology, Honorary Senior Fellowship (New York, NY)

### SELECTED SOLO EXHIBITIONS

- 2013 *High Performance Gear*, bitforms gallery (New York, NY)
- 2010 *Notyetness*, bitforms gallery (New York, NY)
- 2009 *Melancholia*, Nelly Aman (Tel Aviv, Israel)
- 2007 *World of Awe, Chapter III: Object of Desire*, The Jewish Museum (New York, NY)  
*Warm Fields*, bitforms gallery (New York, NY)  
*And I Was Both Tongues*, Nelly Aman (Tel Aviv, Israel)
- 2005 *Netizens II*, Sala Uno Gallery (Rome, Italy)
- 2004 *World of Awe: New Works*, bitforms gallery (New York, NY)  
*Code: Skin*, Nelly Aman (Tel Aviv, Israel)

### SELECTED GROUP EXHIBITIONS

- 2014 *OECD 2014*, Art in Embassies Program (Paris, France)
- 2012 *World On A Wire*, bitforms gallery (New York, NY)
- 2011 *Soft Borders*, UNESP, Universidade Estadual Paulista (São Paulo, Brazil)
- 2010 *The Politics of Art*, National Museum of Contemporary Art (Athens, Greece)  
*ArchITeCHtonica*, CU Art Museum, University of Colorado at Boulder (Boulder, CO)
- 2009 *Heart in Heart*, National Museum of Contemporary Art (Athens, Greece)  
*Spazialismo*, bitforms gallery (New York, NY)
- 2008 *E-critures*, National Museum of Contemporary Art (Athens, Greece)  
*Live Herring*, Jyväskylä Art Museum, Holvi (Jyväskylä, Finland)  
*Journeys into New Art: Bodies in Cyberspace*, National Museum of Art of the XXI Century (Rome, Italy)
- 2007 *Contemporary Baroque: Extreme Excess / Özel Sergi*, Beral Madra Contemporary Art Center (Istanbul, Turkey)
- 2002 *Whitney Biennial*, Whitney Museum of American Art (New York, NY)

**JEANNETTE LOUIE / CV**  
**jeannettelouie2.com**

**EDUCATION**

- 1998 Skowhegan School of Painting & Sculpture (Skowhegan, ME)  
MFA, Vermont College of Norwich University (Montpelier, VT)  
1985 BFA, Parsons School of Design (New York, NY)

**SELECTED SOLO EXHIBITIONS**

- 2006 *Beat for You*, Homie Galerie (Berlin, Germany)  
2003-2004 *Words To Live & Love By*, Urban Institute for Contemporary Arts (Grand Rapids, MI)  
2002 *Rendering*, Mills College Art Museum (Oakland, CA)  
2001 *Monochrome (for u.s.)*, Esso Gallery (New York, NY)  
2000 *Over There, Over Here, Hokusai*, Esso Gallery (New York, NY)

**SELECTED GROUP EXHIBITIONS / SCREENINGS**

- 2014 *Citizen Jane Film Festival* (Columbia, MO)  
*STATE Experience Science Festival* (Berlin, Germany)  
*Imagine Science Film Festival* (New York, NY)  
*Minneapolis Underground Film Festival* (Minneapolis, MN)  
*FLEXIFF* (Sydney, Australia)  
*Toronto Independent Film Festival* (Toronto, Canada)  
*The Columbus International Film & Video Festival* (Columbus, OH)  
*Fabrica Utopia, Festival Miden* (Andros, Greece)  
*Brooklyn Film Festival* (Brooklyn, NY)  
*Los Angeles Asian Pacific Film Festival* (Los Angeles, CA)  
*Athens International Film & Video Festival* (Athens, OH)  
*Beyond the Frontier, CineGlobe, International Film Festival at CERN* (Geneva, Switzerland)

**SELECTED AWARDS**

- 2002 Mid Atlantic Foundation for the Arts / New Jersey State Council on the Arts Fellowship  
2001 Creative Capital Foundation Grant (New York, NY)  
1999-2000 Rome Prize, American Academy (Rome, Italy)

**SELECTED RESIDENCIES**

- 2007 The Center for Photography at Woodstock (Woodstock, NY)  
2002 Yaddo, Geraldine R. Dodge Foundation Fellowship (Saratoga Springs, NY)  
2001-2002 The Marie Walsh Sharpe Art Foundation, Space Program (New York, NY)

## **RANU MUKHERJEE / CV**

**www.ranumukherjee.com**

Represented by Gallery Wendi Norris, San Francisco, CA.

### **EDUCATION**

- 1993 MFA, Royal College of Art (London, UK)  
1988 BFA, Massachusetts College of Art (Boston, MA)

### **SELECTED SOLO EXHIBITIONS**

- 2013-2014 *Apparitions*, Gallery Wendi Norris (San Francisco, CA)  
2012 *Beta Space: Ranu Mukherjee: Telling Fortunes*, San Jose Museum of Art (San Jose, CA)  
2011 *Absorption into the Nomadic and Luminous*, Frey Norris Contemporary and Modern (San Francisco, CA)

### **SELECTED GROUP EXHIBITIONS**

- 2014 *Partial View: Recoding Sacred Objects*, Manresa Gallery (San Francisco, CA)  
*Radiant Chromosphere*, Oakland Museum of California (Oakland, CA)  
*Initial Public Offering*, San Jose Museum of Art (San Jose, CA)  
2013 *This is not America: Resistance, Protest and Poetics*, Arizona State University Art Museum (Tempe, AZ)  
*Vital Signs, New Media Art from the SJMA Collection*, Wichita Art Museum (Wichita, KS)  
*Grain*, Gallery Espace (New Delhi, India)  
*A Tempting Fate: Inevitability and Scientific Fortune*, Aggregate Space Gallery (Oakland, CA)  
*Only a Signal Shown*, Southern Exposure (San Francisco, CA)  
2012 *Making Camp*, Sun Valley Center for the Arts (Ketchum, ID)  
*Museum Store Mini Solos*, SpaceBi at Asian Art Museum Store (San Francisco, CA)  
*United States of Asian America*, 15th annual exhibition, SOMARTS (San Francisco, CA)  
2011 *Bay Area Now 6*, Yerba Buena Center for the Arts (San Francisco, CA)  
*Picturing Parallax: Photography and Video from the South Asian Diaspora*, San Francisco State University (CA)

### **SELECTED PUBLIC WORKS / PROGRAMS**

- 2014 *Spicy Wild, Growing Gritty, Spirited Transmission*, Art on Market St. Kiosk Poster Series, San Francisco Arts Commission (CA)  
*A Procession for the Extracted For-Site Foundation*, ongoing (Nevada City, Nevada)  
2013 *Procession for Future Artifacts*, Artists Drawing Club at Asian Art Museum (San Francisco, CA)  
*Towards a Creole Procession*, Luggage Store Annex (San Francisco, CA)  
2009 *Tender Transmissions*, Luggage Store Annex and the Tenderloin National Forest, Wonderland Show (San Francisco, CA)

### **SELECTED AWARDS / RESIDENCIES**

- 2015 Space 118, Mumbai Residency Award  
2009 Kala Fellowship Award and Residency (Berkeley, CA)

# MARY BATES NEUBAUER / CV

[public.asu.edu/~mbates/](http://public.asu.edu/~mbates/)

## EDUCATION

- 1981 MFA, Indiana University, Ford Fellow (Bloomington, IN)  
1973 BFA, Colorado State University (Fort Collins, CO)

## SELECTED ACADEMIC EXPERIENCE

- 1996-present Professor of Sculpture, Arizona State University (Tempe, AZ)  
1994-1995 Fulbright Fellow, Anglia Polytechnic University (Cambridge, England)  
1982-1996 Department Chair and Professor- Sculpture, Sonoma State University (Rohnert Park, CA)

## SELECTED EXHIBITIONS

- 2014 *Garfagnana Innovazione*, Museum of Sculpture and Architecture (Pietrasanta, Italy); Museo Archeologico (Florence, Italy)  
*Half the Sky: Intersections in Social Practice Art*, LuXun Academy of Fine Art (Shenyang, China)  
*3D Printing and the Arts: What Things May Come*, Sarofim School of Art, Southwestern University (Georgetown, TX)  
*Savienošānās Coalescence*, Talsi Regional Museum (Talsi, Latvia)  
*Le French May Festival* (Hong Kong, China)  
*Full Bloom*, Terminal Four Level 3 Phoenix Sky Harbor Airport (Phoenix, AZ)  
*WCA Best of 2014 & Equilibrium*, ARC Gallery (Chicago, IL)
- 2013 *Hand, Eye, Mind: Sensory Models for Holistic Learning*, Experimental Gallery, India Habitat Centre, (New Delhi, India)  
*Intersculpt 2013*, La Cybersculpture l'Association Française de Prototypage Rapide, European Forum on Additive Manufacturing L'ecole Centrale (Paris, France)  
*Centre Arts et Sciences: Création, Numérisation, et Impression 3D Fête de la Science*, Musée de la Corse (Corte, France)  
*3D Printing, Cité des Sciences*, Parc de la Villette (Paris, France)  
*Intersculpt 2013*, Café des Arts des Sciences et des Techniques, l'Ecole Centrale Paris (Paris, France)  
*New Media Festival*, Los Angeles Center for Digital Arts (Los Angeles, CA)  
*Envisioned Landscape*, Slocumb Galleries, East Tennessee State University (Johnson City, TN)  
*Science Inspires Art: The Cosmos*, New York Hall of Science (Queens, NY)  
*Art in an Age of Climatological Catastrophe*, China Brotsky Gallery (San Francisco, CA)  
*Making Connections: Water and Life Meet in a Desert City*, Shemer Art Center (Phoenix, AZ)
- 2012 *Spark 3DS, Digital Art Making/ An Art Economy + A New Economy*, Gallery 13 (Minneapolis, MN)  
*Sculpture Numerique*, Musée de La Princerie, Verdun, Meuse (Lorraine, France)  
*Generation XYZ: The Past, Present, and Future of Digital Sculpture*, Night Gallery (Tempe, AZ)  
*EMERGE Festival, Digital Culture Walkway*, Arizona State University (Tempe, AZ)  
*Full Circle: The Art of Materials, Research and Creation in Rapid Prototyping*, Manchester Institute for Research and Innovation in Art and Design (MIRIAD), Sarofim Gallery Southwestern University (Georgetown, TX)

## MARIE SIVAK / CV

mariesivak.com

### EDUCATION

- 1997 MFA Sculpture and Extended Media, Virginia Commonwealth University (Richmond, VA)  
1994 BFA Sculpture, The University of the Arts (Philadelphia, PA)

### SELECTED ACADEMIC EXPERIENCE

- 1997-present Lead Faculty, Sculpture Program, Sylvania Campus, Portland Community College (Portland, OR)

### SELECTED GRANTS / AWARDS

- 2014 Career Opportunity Grant, Oregon Arts Commission and The Ford Family Foundation (Roseburg, OR)  
2013 Margo Harris Hammerschlag Award, National Association of Women Artists (New York, NY)  
2012 Career Opportunity Grant, Oregon Arts Commission and The Ford Family Foundation (Roseburg, OR)  
2010 Oregon Arts Commission Individual Artist Fellowship (Portland, OR)  
2006 Residency Berllanderi Sculpture Workshop (Wales, UK)  
2005 First Prize, Yeck National Young Sculptors Competition, Miami University (Oxford, OH)  
2002 Regional Arts and Culture Council Project Grant (Portland, OR)  
1997 Virginia Museum of Fine Arts Professional Fellowship, Juried by Andrew Connors (Richmond, VA)

### SELECTED SOLO EXHIBITIONS

- 2014 *Tenuous*, Dan and Gail Cannon Gallery of Art, Western Oregon University (Monmouth, OR)  
2012 *Smokescreen*, curated by Charlotta Kotik, A.I.R. Gallery (Brooklyn, NY)  
2008 *Ephemera: Recent Work in Video and Stone*, A.I.R. Gallery (New York, NY)  
2007 *Mnemosyne's Mnemonic*, Laura Russo Gallery (Portland, OR)  
2006 *Cipher*, The Art Shop (Abergavenny, Wales, UK)  
2003 *Lacing Atropos*, Contemporary Crafts Museum (Portland, OR)  
1998 *Spire for the Material World Exhibition*, SPACES (Cleveland, OH)  
1997 *The Comfort Food*, Anderson Gallery (Richmond, VA)

### SELECTED GROUP EXHIBITIONS

- 2014 *Disjecta*, 8th Annual Auction (Portland, OR)  
2013 *Oracle*, Curated by Carson Legree, with Susie Lee & Patrick Kelly, Archer Gallery, Clark College (Vancouver, WA)  
2012 *Selections from Portland 2012: A Biennial of Contemporary Art*, Schneider Museum of Art (Ashland, OR)  
*Celebrating Kindred Spirits & Strange Bedfellows*, curated by Catherine Morris, A.I.R. Gallery (Brooklyn, NY)  
2011 *Woollahra Small Sculpture Prize Exhibition*, Woollahra Council Chambers, Double Bay (Sydney, Australia)  
2010 *I can't get you out of my mind*, curated by Hiro Sakaguchi, Seraphin Gallery (Philadelphia, PA)  
*...and sweeps me away*, curated by Barbara O'Brien, A.I.R. Gallery (Brooklyn, NY)

## **CAMILLE UTTERBACK / CV**

**camilleutterback.com**

Represented by Haines Gallery, San Francisco, CA.

### **EDUCATION**

- 1999 MPS, Interactive Telecommunications Program, New York University (New York, NY)
- 1992 BA, Magna Cum Laude, Williams College (Williamstown, MA)

### **SELECTED AWARDS / GRANTS / RESIDENCIES**

- 2015 Artist Residency, Pilchuck Glass School (Stanwood, WA)
- 2012 Artist Residency, Djerassi Resident Artists Program (Woodside, CA)
- 2011 Artist Residency, Bermant Fellowship, Vermont Studio Center (Johnson, VT)
- 2009 MacArthur Foundation Fellowship

### **SELECTED COMMISSIONS**

- 2013 *Flourish*, The Liberty Mutual Group (Boston, MA)
- 2012 *Span*, FOR-SITE Foundation (San Francisco, CA)  
*Dancers (Red & White)*, Mercedes House - North Lobby (New York, NY)
- 2011 *Floating World*, Mercedes House - South Lobby (New York, NY)  
*Active Ecosystem, SMF*, Sacramento International Airport (Sacramento, CA)

### **SELECTED SOLO EXHIBITIONS**

- 2013 *Camille Utterback: Tracing Time / Marking Movement*, The Frist Center for the Visual Arts (Nashville, TN)
- 2010 *Collider 2: Camille Utterback*, Emily Davis Gallery, University of Akron (Akron, OH)
- 2009 *Camille Utterback*, Contemporary Art Center of Virginia (Virginia Beach, VA)
- 2008 *Three One Person Shows*, Nelson Gallery (Davis, CA)
- 2007 *Animated Gestures*, Art Interactive (Cambridge, MA)  
*Camille Utterback – Untitled 5*, El Paso Museum of Art (El Paso, TX)
- 2005 *External Measures Series*, Manwaring Gallery, Connecticut College (New London, CT)
- 2002 *Engaging Spaces*, MassMoCA, KidSpace Gallery (North Adams, MA)

### **SELECTED GROUP EXHIBITIONS**

- 2013 *Patent Pending*, ZERO1 (San Jose, CA)  
*2013 California-Pacific Triennial*, Orange County Museum of Art (Newport Beach, CA)  
*Poetics of Construction*, Haines Gallery (San Francisco, CA)
- 2012 *International Orange*, FOR-SITE Foundation, Fort Point (San Francisco, CA)  
*On the Edge: Light, Sound, Life*, Hå Gamle Prestegard, Obrestad Lighthouse (Hå, Norway)
- 2011 *Seeing / Knowing*, Graham Gund Gallery, Kenyon College (Gambier, OH)

**ADRIANNE WORTZEL / CV**  
**adriannewortzel.com**

**EDUCATION**

- 1995 MFA, The School of Visual Arts, Computer Art (New York, NY)  
1963 BA, Brooklyn College, Fine Arts with Honors (Brooklyn, NY)

**SELECTED ACADEMIC EXPERIENCE**

- 2003-present Faculty Member: Interactive Technology and Pedagogy- Certificate Program for PhD candidates in any discipline;  
Co-teach: Theory, Design, and Practice, City University of New York (New York, NY)  
1998-present College of Technology, City University of New York, Professor, Entertainment / Emerging Media Technologies (New York, NY)

**SELECTED EXHIBITIONS / PERFORMANCE PRODUCTIONS / INSTALLATIONS**

- 2015 Solo Exhibition of Videos, Asheville Art Museum, Asheville Art Museum Black Box Theater (Asheville, NC)  
2014 *Fumiya Island* by Adrienne Wortzel and Daniel Bisig, Official juried selection, Imagine Science Film Festival (New York, NY)  
2013 *archipelago.ch*, World premiere at *World Congress* and *Exhibition of Robots, Humanoids, Cyborgs* (Zurich, Switzerland)  
*RE IMAGINE RE INVENT: Photographers Redefining Reality*, Holden Luntz Gallery (Palm Beach, FL)  
2012 *ISEA 2012/SARC (Scientists / Artists Research Collaborations)*, University of New Mexico - Architecture (Albuquerque, NM)  
2011 *Choreographing A Well-Regulated Militia, MAKER FAIRE*, New York Hall of Science (Queens, NY)  
2010 *ARTIFICIAL SELECTION*, curated by Rhiannon Mercer, 516 Arts Gallery (Albuquerque, NM)  
2009 *Reenactment of the Battle of the Pyramids*, performance at *Theater of Code*, Light Industries (Brooklyn, NY)  
*Franklin Furnace / Performa 09 Performance Art Biennial*, Abrons Art Center/Henry Street Settlement (New York, NY)  
2005 *Artport Gate Artist Commission*, Whitney Museum of American Art (New York, NY)  
2001 *Camouflage Town, DATA DYNAMICS*, Whitney Museum of American Art (New York, NY)

**SELECTED GRANTS**

- 2006 Greenwall Foundation Grant (New York, NY)  
2006 New York State Council On The Arts  
2005 Franklin Furnace Visionary Artist Award (New York, NY)  
2003 Franklin Furnace Fund For Performance Art Award (New York, NY)  
2001-2011 Professional Staff Congress-City University of New York (PSC-CUNY) Research Awards (New York, NY)  
2005-2006 Graduate Research Technology Initiative, City University of New York (New York, NY)

**SELECTED RESIDENCIES**

- 2014 Women's International Study Center, Scholar-in-Residence (Santa Fe, NM)  
2012 SARC (Science and Art Research Collaborations), Los Alamos and Sandia National Laboratories and the University of New Mexico (Albuquerque, NM)  
2008 Eyebeam Center for Art and Technology, Artist-in-Residence (New York, NY)

**JANET ZWEIG / CV**  
**www.janetzweig.com**

**EDUCATION**

- 1981 MFA, The Visual Studies Workshop, State University of NY (Rochester, NY)  
1971 BA, Cornell University (Ithaca, NY)

**SELECTED ACADEMIC EXPERIENCE**

- 1982-present Senior Critic, Rhode Island School of Design (Providence, RI)  
2008 Lecturer, Graduate Program in Public Humanities, Brown University (Providence, RI)  
1991-2000 Visiting Critic, Yale University (New Haven, CT)

**SELECTED GRANTS / AWARDS**

- 2007 Residency at the MacDowell Colony (Peterborough, NH)  
1999 New York Foundation for the Arts Fellowship, Computer Arts  
1999 Joan Mitchell Foundation Grant  
1994 National Endowment for the Arts Visual Arts Fellowship, Sculpture

**SELECTED PUBLIC ART COMMISSIONS**

- 2015 Westmoreland Museum of American Art and the City of Greensburg (PA)  
Public art and temporary project, City of Redmond (WA)  
2012 *Columbus Never*, temporary work for Columbus Bicentennial, commissioned by Columbus 2012 Public Art (OH)  
*Prairie Logic* (Kansas City, MO)  
*North of the North Pole*, Glen Oaks Library, commissioned by NYC Department of Cultural Affairs (Queens, NY)  
2011 *Pedestrian Drama* (Milwaukee, WI)  
*Limited Edition*, Brightwater Treatment Plant, commissioned by 4Culture (Seattle, WA)  
2010 *Lipstick Enigma*, at the Harris Engineering Center, UCF, commissioned by FL Art in State Buildings (Orlando, FL)  
2009 *7:11AM 11.20.1979 79°55'W 40°27'N*, Mellon Park's Walled Garden, commissioned by Pittsburgh Parks Conservancy (PA)  
*The Opposite of a Duck*, Fall City Library, commissioned by King County Library System (Fall City, WA)  
2007 *If You Lived Here You'd be Home*, Maplewood Light Rail station, commissioned by Metro Arts in Transit (St. Louis, MO)

**SELECTED EXHIBITIONS**

- 2012-2013 *Directed: The Intersection Between Book, Film, and Visual Narrative*, Minnesota Center for Book Arts (Minneapolis, MN) and Carleton College (Northfield, MN)  
2008 *Art in the Public Sphere: Singular Works, Plural Possibilities*, University Gallery, Fine Art Center, UMass (Amherst, MA)  
2007 *InWords: The Art of Language*, University Gallery, University of Delaware (Newark, DE)  
2006 *Complicit! Contemporary American Art & Mass Culture*, University of Virginia Art Museum (Charlottesville, VA)  
2005 *Along the Way: MTA Arts for Transit, Celebrating 20 Years of Public Art*, UBS Gallery (New York, NY)