

DIGITAL ART (R)EVOLUTION



Anne Morgan Spalter, *Bora Bora—Sunset*, 2013, 1080p HD digital video, 3min seamless loop

October 2 - November 10, 2013

Curated by Isabel Mattia and Michael Spalter

DIGITAL ART (R)EVOLUTION

Featuring work by Anne Spalter and Leslie Thornton

and seminal works from the
Spalter Digital Art Collection
dated 1954 - present

**DEDEE SHATTUCK
GALLERY**

front cover composed of **SK92 (Mark Wilson)**, **Bora Bora—Palm Fronds (Anne Morgan Spalter)**, and **The Animates: La Brea Tar Pits (Leslie Thornton)** back cover **Manfred Mohr, Prog. 156**, 1974, ink/paper, 60 x 60 cm

Dedee Shattuck Gallery is thrilled to present *Digital Art: (R)evolution*, an exhibition of works by Anne Morgan Spalter and Leslie Thornton in the context of the New Media pioneers who came before them. Morgan Spalter and Thornton process original source video through customized editing software to create kaleidoscopic video pieces and still digital imagery. The works transform mathematical algorithms into visualizations, raising conceptual questions through technique and content. Historic works are generously loaned by the Spalter Digital Art Collection. This exhibit is curated by Michael Spalter and Isabel Mattia in collaboration with the artists.

Anne Morgan Spalter travels extensively, shooting video, exhibiting work, lecturing and teaching. She has exhibited on a billboard in Atlanta as part of the Billboard project, in RI at the RISD museum, in New York, Florida, and LA, as well as Dubai, Italy and Croatia. Her most recent body of work includes source imagery from Bora Bora. Spalter is influenced by the intricate patterning of Islamic art and the concentric mandala imagery of Hindu and Buddhist art. As skyscrapers, taxicabs, palm fronds, temple architecture, and desert-scapes fold upon themselves, abstract forms and patterns emerge. The viewer, entrenched in the hypnotic experience of viewing the piece, begins to ponder the permanence and solidity of man-made structures and the landscapes we interact with. Morgan Spalter will also exhibit new pieces that pioneer presentation formats for digital work including a media screen coffee table, printed decals and wall paper, and screen “gem” objects. Modern Painters/BLOUIN ART INFO described her work as “dazzling and hypnotic...provoking an experience of dislocation.”

Leslie Thornton is an enormously influential artist and acknowledged pioneer in media. A recent Guggenheim fellow, she shows at the Winkleman Gallery in New York, has exhibited at MoMA, and was featured in the 2008 Whitney Biennial and in Whitney Museum’s millennial show “The Art of the Century”. She was featured last year in Artforum’s 50th Anniversary Issue in an article by media scholar Ed Halter.

Here, she exhibits kaleidoscopic transformations of video imagery derived from video footage of fauna, insects, and a new piece featuring the bubbling tar pits of the La Brea tar Pits in LA. The work is presented in a “binocular” format, where the original footage is visible in one lens circle adjacent to the transformed footage. This creates the sense that the organic source material is in control of the abstracted outcome; as a zebra tilts his head slightly, or a tar bubble pops, the transformed image simultaneously twists and shifts. Because the viewer cannot focus on both images simultaneously, the eye either darts back and forth, processing the pure imagery and abstraction separately, or pulls back to experience the interplay of movement between the two lenses. Also on view will be a version of “Luna”, a video triptych that processes footage from Coney Island using visual signifiers that reference a variety of specific film genres.

The Spalter Digital art collection is an encyclopedic survey of the development and progression of computer based art. With works dating from 1954 to present, it is one of the most exhaustive and significant private digital art collections in existence. Collectors Michael and Anne Morgan Spalter have lent works to NY MOMA, the V&A Museum in London, and the SVA gallery in New York. They have made images available to numerous texts and essays. Along with works by Morgan Spalter and Thornton, this exhibit includes examples from the collection that highlight over 50 years of innovation, such as the first documented computer generated image- created by Ben Laposky in 1954, and stunning seminal works by digital art pioneers Desmond Paul Henry, Manfred Mohr, Mark Wilson, Vera Molnar, Jean-Pierre Hébert, Roman Verotsko, and others. This exhibit is not only a fascinating and compelling display of contemporary work, but also an educational opportunity for viewers and collectors interested in understanding the development of New Media Art.

When Dedee and I first toured Anne's Studio, and visited the Spalters' collection, we knew we had come across something special. Here were two passionate, creative, and generous people, who actively preserve, produce, and disseminate digital media work. Although the collection spans over 50 years, the genre is still exploding and evolving as technology and creative ideas develop exponentially. Anne then introduced us to Leslie, another bold voice on the video and New Media art scene. This exhibition is an exploration of the development of the genre thus far, and a call to action for the new collectors, scholars, and artists who will carry it forward as Leslie Thornton and Anne and Michael Spalter do today. We see technological innovation as a forever-expanding frontier for the fine arts world. Artists will continue to invent new tools, concepts and presentation techniques that will re-define art making and ripple out into the technology world and beyond. This exhibit is part of the growing history of New Media art, and we are pleased to share it with you.

A handwritten signature in black ink, appearing to read 'Isabel Mattia', with a stylized flourish at the end.

Isabel Mattia, Lead Curator

**DEDEE SHATTUCK
GALLERY**

DIGITAL ART (R)EVOLUTION

Almost 20 years ago Anne Spalter gave a talk at Brown University called “Evolution or Revolution? The Computer and the Visual Arts from the Artist’s Perspective.” She noted that “Digital image processing and drawing techniques present artists with profound and revolutionary ways of thinking about and using such fundamental elements of visual art as scale, perspective, line, gesture, and color.” These *revolutionary* methods are evidenced in this show’s works, some dating as far back as the 1950s. The enormous art-historical importance of these early creators is only now being recognized. Of equal importance here is the *evolutionary* nature of new media—the slow accumulation of bodies of work and their connection to art practice before and after the dawn of the computer era.

The pioneering practitioners of computer art were stranded for years on a technological island—creating bodies of work of great complexity and aesthetic power that were isolated from mainstream art discourse. Early artists working with digital technologies were often dismissed or ignored. One artist, Manfred Mohr, even had an egg thrown at him in the 1970s when giving an artist’s talk. Early computer-generated works were shown chiefly at “computer art” venues- unattended by general art critics.

This troubling situation began to change gradually as the ubiquity of the computer made the technology less threatening and as computers became increasingly common artists’ tools. Unfortunately, these pioneers have not yet been fully incorporated into art history and many contemporary artists using computing technologies are unacquainted with one of their own key historical roots.

This show brings together a selection of early works by artists from the ’50s, ’60s, ’70s and beyond, as well as works of two contemporary artists working primarily with digital video—Anne Morgan Spalter and Leslie Thornton. The off-the-shelf programs available today stand on the shoulders of artists and scientists who programmed all their own work and faced the crazy challenges of making art in the age of punchcards and room-sized computers. We believe that viewers will appreciate these early works in a way that would be impossible without seeing contemporary work, and that contemporary artists will also benefit from the opportunity to study some of these groundbreaking early art works. In conjunction with some texts, both historical and didactic, the physical placement of the works—their juxtapositions and groupings—evokes, demonstrates, and clarifies many of the connecting ideas, tracing the continuities and evolution of computer art. Through this unique opportunity we hope that what may have seemed like two disconnected continents will be recognized as part of the same landmass—one that merely needed to be seen from a broader view.

THE SPALTER DIGITAL ART COLLECTION

The thread weaving through and connecting all the works in the show is Anne and Michael Spalter's Digital Art Collection of early new media art. This exhibition was inspired by the excitement of exploring this field as artists and collectors, and meeting the people who helped make it the field it is today. As collectors, curators and appreciators of artworks know, every work has a story.

The Collection began while Anne was writing *The Computer in the Visual Arts* in the late 1990s. The book has become a standard reference text in the field and Roger Mandle, former Executive Director of the Qatar Museums Authority and before that President of the Rhode Island School of Design, described it as “a seductively articulate and illuminating introduction to the rapidly expanding world of the computer and art, design, and animation...”

Artist and author, Anne, was immersed in the artistic, aesthetic, and technical aspects of the movement, but Michael, from his perspective as an art-history major, pointed out how similar this new movement was to other great art movements such as the Impressionists, Abstract Expressionists, the Constructivists, and the mechanomorphic work of Dadaists like Picabia and Duchamp.

These artists had great difficulty finding a public for their art. Many of them worked in isolation, rejected by the academy, including art schools, galleries, museums, critics and art historians, and barred from conventional venues. Like other initially marginalized movements, virtually all the participants knew one another and supported one another's work.

Inspired by the accomplishments of these intrepid pioneers, the Spalters began to think about acquiring some of these remarkable art works. They had limited financial means; indeed, Anne designed and taught the first digital fine art courses at Brown University and RISD while supporting Michael's fledgling business. As they got to know the artists, they became emotionally as well as intellectually involved in the movement, and have been humbled to become stewards of a remarkable movement in the history of art. Thanks to their foresight, their collection has become one of the most exhaustive and highly regarded private collections of digital works that exists today.

At the start, the Spalters did not realize what a limited interest the art world would have in these intrepid pioneers. Their initial hope was that these artists would not be forgotten and even that some day they would hang in major museums and be studied and appreciated, as they deserved. This goal may well be realized sooner than they had anticipated, as they are receiving more and more requests to lend or donate the art works for shows—at places from the Centre Georges Pompidou in Paris, the V&A in London, the Daelim Contemporary Art Museum in Seoul, as well as the MFA in Boston and MoMA in New York.

Special thanks to the tireless efforts of Assistant Curator for the Spalter Digital Art Collection, Phil Shaw, who's creativity and dedication were integral to this exhibition.

SHOW THEMES

This show covers a broad range of computer art, also commonly called digital art or new-media art, including some of the earliest works as well as more recent pieces by the same pioneering artists. Also featured are contemporary media artists Leslie Thornton and Anne Morgan Spalter, whose practice includes elements and themes common in computer art of all periods as well as unique and marked differences. A primary difference lies in the relation between abstraction and representational imagery. Common ground includes:

1. The Hand vs. The Machine
2. Order vs. Randomness
3. Grid vs. Circle.

The Hand vs. the Machine

The pioneering computer artists shown here all had to program their own works using textual editors—there were no visual interfaces with windows and buttons and image creation and editing tools like those we have today. The lines and shapes were created via written instructions—not by drawing with the hand. Most had traditional arts training before using any sort of technology, and many others became engaged with tactile processes and hand/body-driven decisions: Desmond Paul Henry added paint and ink after using his drawing machines, Roman Verostko applied gold leaf and hand-drawn brush strokes, and today, Spalter uses paints on top of printed materials.

The conceptual battle about the role of non-hand-based art production tools is hardly new with computers—photographers had already struggled for decades with similar notions—but in 1960s and '70s a work “drawn” by computer was seen by many in the traditional art world as improper and practically evil—something that was against art and couldn’t possibly be expressive. As Grant Taylor puts it in his seminal forthcoming book, *The Machine That Made Science Art: The Troubled History of Computer Art 1963-1989*, “for many of its detractors, computer art was simply a contradiction in terms.” This attitude was based largely on lack of familiarity with computation. Now that powerful computers are everywhere, in everything from your watch to your phone, never mind your tablet and laptop, the integration of computational processes into almost anything seems a matter of course. Artists now incorporate the computer without even referencing it as part of the medium in their citations.

Order vs. Randomness

Order and randomness were key themes in early computer art. It was easy to make a series of identical squares—but not aesthetically interesting. Computer art really took off when random variables were incorporated into the algorithms (step-by-step instructions written in computer code), introducing modulated change that could be channeled but not completely controlled.

Through randomness, artists could create endless variations, exploring large conceptual spaces with ease—and could choose the images that rang true to their vision. It combined cutting-edge technology with a little bit of surrealism in a truly revolutionary manner. Manfred Mohr likened the process to gardening—weeding out unsatisfactory results and improving the inspirational ones. Although not technically random, the unpredictable complexity of the results in later works, such as Thornton's and Spalter's video kaleidoscopes, provides a similar opportunity to “find” things that would not necessarily have existed without the intervention of a machine.

Grid vs. Circle

The Cartesian (x, y) grid is the underlying structure of virtually all 2D computer graphics. The ease of programming straight lines and simple shapes with x and y coordinates strongly influenced early computer artworks. Some artists continued this aesthetic—such as Vera Molnar in Paris, who, with the slightest of angle variations, can turn a series of similar shapes into a stimulating emotional and visual landscape. Or Manfred Mohr in New York City, who has devoted his artistic career to the study of cubes in three and higher dimensions.

From the very beginning there were also artists whose aesthetic resonated better with the curve. Those working with analog devices—Ben Laposky in Cherokee, Iowa with his oscilloscope and Desmond Paul Henry in Manchester, UK with his drawing machines—had easier access to curves and circles. Artists such as Jean-Pierre Hebert in Santa Barbara used spline curves, advanced mathematical descriptions of lines, to generate sensual patterns. These curve-based works often feel more natural to viewers and the rectilinear ones more architectural and analytical.

The questions that Anne Spalter set out to address in her 1993 lecture: *Evolution or Revolution? The Computer in the Visual Arts* comes to life for viewers of this exhibition.

Thanks to Professor Thomas Zimmer, independent scholar, writer, artist, and curator in the fields of philosophy, aesthetics and the history of technology, for his invaluable feedback on the catalogue essay.

Thanks to Jordan Ochs, Gallery Manager for her aptitude and intelligence, and her hard work throughout the exhibition process.

SELECTED INDIVIDUAL ARTISTS AND WORKS

Ben Laposky

Anne and Michael Spalter had read about Ben Laposky and seen reproductions of his works in surveys of early computer art. Imagine Michael's surprise when he saw original editions of 1950's pieces at the BitForms Gallery in New York. When does one ever get the chance to provide safekeeping for the first instance or iteration of anything? The Spalters acquired several works from the show and were particularly excited to find a print of *Electronic Abstraction #4*—documented as the first known work of computer art.

Laposky created his beautiful series by photographing the screen of an oscilloscope with long-exposure camera settings. Although the oscilloscope is a technical device, it is an analog machine, not a digital one like today's computers. Laposky's pieces represent a crossing over of such work, using analog and digital, mathematics and machinery, to create unique and stunning visual compositions. Their sensual, dancer-like forms are proof that, from the beginning, the field was not limited to straight lines and rectangles, but contained a remarkable complexity and richness. Indeed, the oscilloscope screen itself, while it presents a sensuous linear description of form and time, is also a circle.



Ben F. Laposky, *Electronic Abstraction #4*, 1954-1956,
oscilloscope, high-speed film, photo paper



Desmond Paul Henry, *Androbulus*, 1962, white India ink on black cartridge paper, hand embellishments, Drawing machine Two, 15.35 x 20.47 in

Desmond Paul Henry

[This piece was in *Cybernetic Serendipity* in 1965]

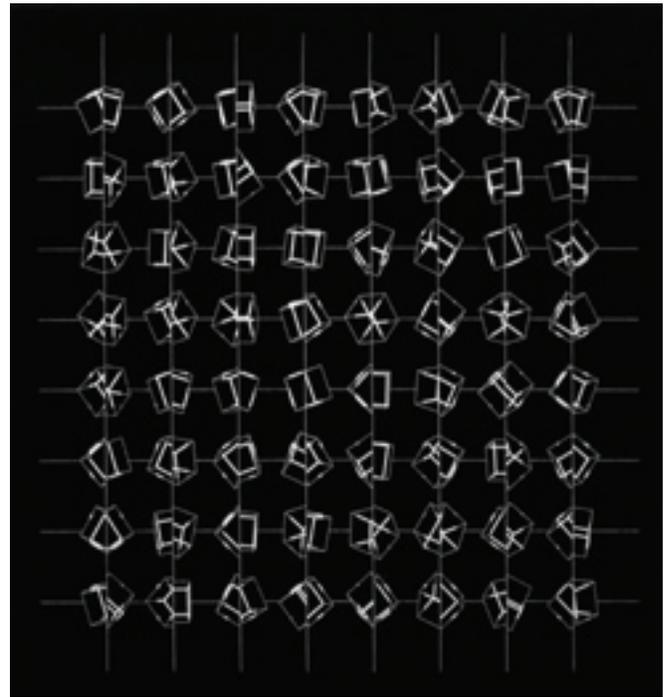
Desmond Paul Henry was a professor of philosophy and a wonderful artist who created some of the earliest machine-made works. Like Ben Laposky, he used analog means—modified bomb-sighting machines from World War II. He also frequently introduced his own hand into the process, often painting and drawing on the curved compositions created by the machines. Anne Spalter, Mike Metz, Rachel Harrison, Shane Hope and others continue in this vein by painting on top of printed materials. Both Henry and Laposky drew on the natural motions and compositions of their mathematically controlled equipment to bring forth surprisingly expressive images.

Manfred Mohr

Manfred Mohr was a musician and artist working with traditional materials and living in Paris when he discovered the computer. In 1971 he was the first artist to have a solo museum show of computer art (at the Musée d'Art Moderne de la Ville de Paris). In this early piece, he takes advantage of the digital computer's power to experiment rapidly with combinations of marks. Drawing on his musical side, Mohr creates a visual score and brings to the world a new language. Geometric shapes and their permutations will become a hallmark of early computer artwork for years to come.

Mohr experimented with several visual “languages” but focuses in the end on the endless potential of the cube. Like Sol le Witt (but earlier), he created algorithms—step-by-step instructions—for exploring the shape of the cube. In addition to explicit instructions about line placement, he uses random variables to create unexpected angles and combinations. Programming his own work and often building his own computers, Mohr has probably investigated the cube more thoroughly than any other artist in history. In this piece, we see quadrants from different points of view rejoined and presented in silhouette. His works also include higher-dimensional cubes—a territory impossible for traditional artists to explore so fluidly. Mohr produces dozens and dozens of candidates for every work that is finally printed; each drawing is unique.

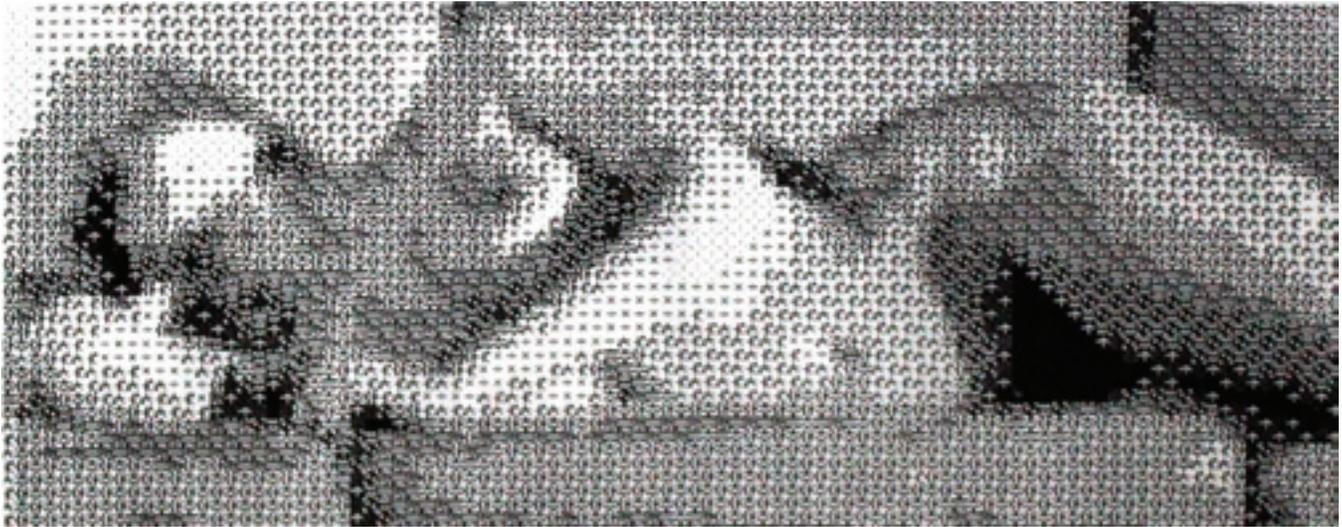
Anne Spalter first met Mohr when she visited his New York apartment to interview him for *The Computer in the Visual Arts*. (She recorded the experience on a small tape cassette recorder. That same night at a restaurant someone stole the recorder. Anne was too embarrassed to tell Manfred what had happened, and for years had to keep emailing him for information for the book.) During that first studio visit, Manfred was adamant that



Manfred Mohr, P-197, 1977-79, screenprint 15/1000 (?), 47.7 x 47.8 cm

he would never stray from black and white—and sometimes gray—and still, 2D, work. The following year, when Anne saw his new work—it was in color! (“But the colors are chosen randomly,” he said, “so it’s OK.”) Two years later he had created motion-based color works that produced endless, unique, cube-based forms. We expect a sculpture any day now...

Manfred has been fortunate to achieve a level of commercial success and fame that bodes well for other computer artists. His works are in museums throughout the world and in 2013 he was a Featured Artist at Art Basel/Basel for his exploration and creation of art with the computer.



Leon Harmon and Kenneth Knowlton, <<Nude>>, 1967
Computer-processed photograph, Photo print from
microfilm 21.9 × 28.3 cm (image: 10.9 × 26.2 cm), IBM 7094,
Stromberg-Carlson S-C 4020 microfilm recorder

Ken Knowlton

In a watershed moment in the history of digital image making, Leon Harmon and Ken Knowlton at Bell Labs were experimenting with ways of making images from small elements that from a distance would represent different gray levels. They thus created the first representational image in digital art.

Instead of using traditional halftones, each small patch of this scanned photograph is represented by small symbols whose proportion of black to white produces the desired gray value. The traditional female nude pose, an icon in itself, dissolves into the tiny symbols that represent elements of the modern computerized world, including (from light to dark) multiplication and division signs, transistors, Zener diodes, vacuum triodes, resistors, tape reels, and a wiring crossover. All of these symbols are in turn

composed of the character [alpha]. This technique is now used in movie posters and other venues, with each “pixel” of the image containing a full color photo. This work prefigured pixel-based imagery and ways of using spots on a grid to create curves and other shapes as well as areas of color and color gradation.

Anne Spalter’s mentor at Brown University, computer graphics pioneer and cofounder of Brown’s Computer Science Department, Andries van Dam, had an original full-sized edition of this mural that was destroyed. Several others were created but it is likely that only one or two remain. This print, signed by Knowlton, is a scan of a picture of the full 5’ × 12’ mural.



Richard Rosenblum, *Pirate Crab*, 1996, archival ink jet print

Richard Rosenblum

In the early 1990's Anne's work was in a show at the deCordova Museum curated by George Fifield and Brian Wallace. She and Michael were struck by an exceptional work—the most powerful use of Photoshop™ that they had ever seen—by an artist named Richard Rosenblum. Anne was even more impressed during Richard's artist talk when he refused to offer any explanatory comments on the work, insisting that people enjoy it visually.

Later, strolling down Boston's Newbury Street, the Spalters saw one of Rosenblum's images in Harold Yezerski's gallery window and went inside. They found that Rosenblum's works were not selling well because of discomfort about the use of computers in art (would artworks be copied? was computer-generated work really art?, etc.). And so, for what

was at that point rather a lot of money—more than they had ever spent on anything except a car—they acquired their first ever art work.

Both technologies like Photoshop and imagery like Richard Rosenblum's are direct descendants of the research done by Knowlton and his colleagues at Bell Lab and elsewhere that led to the ability to work with representational imagery on a screen.

It is remarkable how easy it is to rearrange photographs with Adobe Photoshop™ and how little real fine art has been created in this way. Richard Rosenblum unfortunately has passed, but his work remains unrivalled among artworks using this approach.

Roman Verostko

Roman Verostko is a member of the now internationally recognized Algorists movement, along with other show participants Jean-Pierre Hebert, Manfred Mohr, Vera Molnar, and Mark Wilson. Like many of the early artists in the field, he had had extensive traditional art training. Building on his experience with oils, Verostko began exploiting the computer's ability rapidly to create formal variations, a process he called *epigenetic*, indicating a process building on random variables, similar to biological development of simple or unorganized forms into larger, complex entities—for example, a plant growing from a seed. He also made his own inks and replaced plotter pens with Chinese brushes.

Like Desmond Paul Henry, Roman Verostko applied layers by hand after the computer plotting process was finished. Areas of gold leaf, referring back to Verostko's days as a Benedictine monk, create the feeling of a precious object. In his art and that of Jean-Pierre Hebert, there is an unmistakable spiritual element. Both have used the computer to create deeply moving, Zen-like compositions.

Roman Verostko plays the grid and circle/curves against each other, grouping his colored brush-like line shapes along grid axes and using vertical or horizontal symmetries to create compositional structures.



Roman Verostko, *Gaia Series, Psyche*, 1991, with Gold leaf triangle and custom seals of artist and his wife, 24 x 40 in

Jean-Pierre Hebert

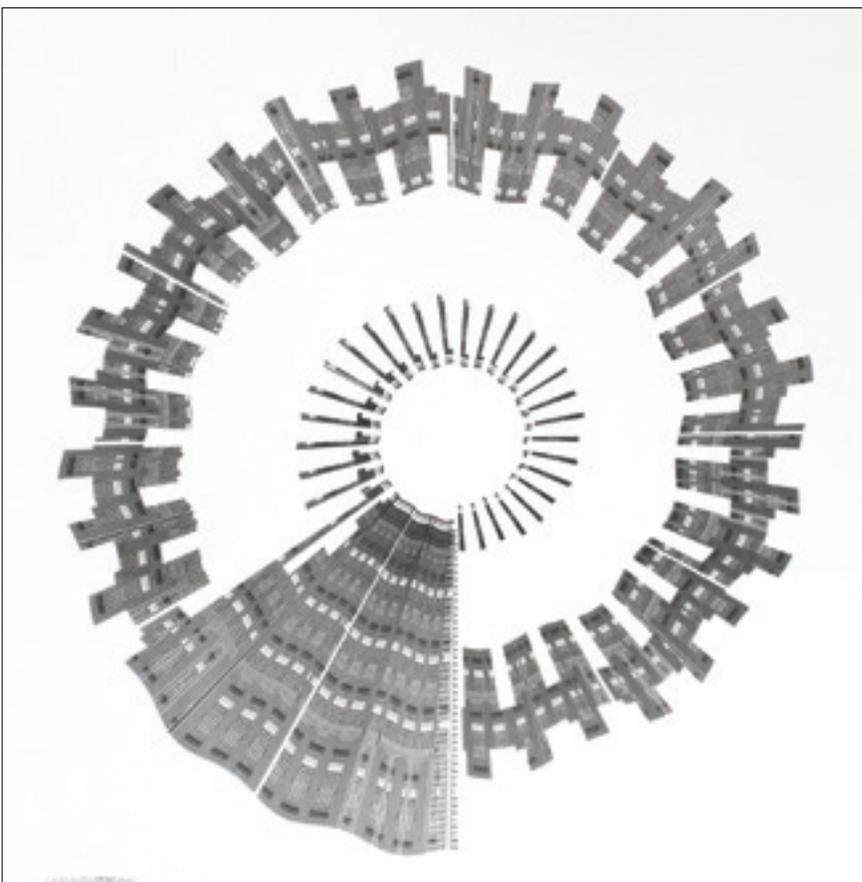
Jean-Pierre Hebert's works recall the fluid continuities produced with analog devices (e.g., the work of Henry and Laposky) but with the control and range of experimentation afforded only by the digital world. He programs his own work, based on equations from physics governing water flow, gravity and other natural phenomena as well as those found in music and astrophysics. He is Artist in Residence at UC Santa Barbara's Kavli Institute for Theoretical Physics.

Again, the works displays a timeless spirituality and emotions that many did not think could be expressed with the rudimentary equipment at first available to him. Although the idea of plotter drawing may seem entirely mechanical, to hear Hebert describe it, it is an active, hands-on process. Pens with fresh ink had to be inserted at exactly the right time. For large pieces, the drawing process could take up to 60 hours, during which the artist had to remain awake and ready to replace pens or intercede if ink blobbed up. A single jostle or printer glitch would mean starting everything over.

Hebert's entrancing works caught the attention of a New York City gallery in the 1980s and they were ready to put together a show—but when they discovered the means of production (he had withheld that based on previous experiences), they rudely dismissed him.



Jean-Pierre Hébert, *Untitled*, 2001, pen and ink (plotter), 21.25 x 21.5 in, framed



Mark Wilson

Mark Wilson studied painting with Al Held at Yale but found his ultimate medium when he purchased a computer in 1980. His work is remarkable for images at once filled with specificity they are yet completely abstract. Like a fractal, the works seem to function on multiple scales—and at times seem to depict everything from microscopic computer chip designs to vast landscapes. While the individual pieces remain rectilinear, they often compose circular forms.

Mark Wilson, SK92, 2001, 1992, unique monochrome plotter drawing made on polyester film, 36 x 36 in



Vera Molnar

Vera Molnar, now 93, has been creating art since she was eight years old. She had already created a large body of traditional work when she began experimenting with computation as part of her practice. As a Grande Dame of digital art, Molnar continues to work in both analog and digital media—and in fact it is sometimes difficult to tell if a piece of hers is done on a computer or painted with acrylic. Her constructivist interests mesh perfectly with basic computational

Vera Molnar, *Carrés*, 2001, 1983, open series, plotter drawing, ink on paper

opportunities. Molnar is a wonderful example of how the computer can be a powerful tool in the right hands. Her precise, sensitive modulations of placement and angles take minimalist ingredients and create a complex feast for the eyes.

Represented in museums all over the world, Molnar recently had a retrospective in Metz and was included in the Elle 200 show at Center George Pompidou. A show in Hungary compared her to Cezanne.

Anne Morgan Spalter

Anne Morgan Spalter is showing a selection of works based on footage shot this summer in Bora Bora. The works are shown in several formats—from video on the wall to a fully functional video coffee table and a reusable, hand-embellished giant wall decal.

Spalter's career reflects her long-standing goal of integrating art and technology. Drawing inspiration from painting, mathematics and Islamic art, Spalter shoots original footage in cities around the world and uses personalized software to develop patterned compositions that explore the concept of the "modern landscape" and work to bring order to visual complexity.

In his book *The Engagement Aesthetic: Experiencing New Media Art Through Critique (International Texts in Critical Media Aesthetics)*, media critic Francisco Ricardo has written

Spalter's eye for submitting horizontal linearity to applied movement in a single continual direction produces a progression or chain of transformations that resolves, as I have said, not toward a single image but rather to the presence of a principle of translation, one whose essence is both abstract and in the world of physical phenomena. This is the intersection, between the worldly and the pure, that mandala makers understood, proposing fleeting visual monuments as aphorisms of contemplation that use form as a way to move toward everything that lies beyond it. And it is the same meditative process into which Spalter's transcendent motion draws us.

Like earlier new-media artists, Spalter enjoys the serendipity made possible by algorithmic transformation of data—in her case digital video footage. She works with a programmer to create custom software that affords a great deal of control over the kaleidoscoping process.

Her work is also informed by previous experience with traditional media—"I feel more like I am painting now, using digital video, than I did using oil paints," she has said. Although the medium is different, issues of composition and color remain the same. The experience of shooting the video and working on many instances of a final piece is in the spirit of action painting. Getting the right shots is always an adventure requiring a combination of risk, tolerance and patience.

Biography

Anne Morgan Spalter is an artist and author whose career reflects her long-standing goal of integrating art and technology. Drawing inspiration from painting, mathematics and Islamic art, Spalter shoots original footage in cities around the world and uses personalized software to develop patterned compositions that explore the concept of the "modern landscape" and work to bring order to visual complexity.

She shows widely and her work is included in leading contemporary collections in the US, Europe and the Middle East as well as in museums such as



Anne Morgan Spalter, *Topio (Video Table) ft. Bora Bora-Lagoon*, 2013, 1080p HD digital video, 3min seamless loop

the Albright-Knox (Buffalo, NY), the Rhode Island School of Design (RISD) Museum (Providence, RI), and the Victoria & Albert Museum (London, UK).

Spalter created and taught the first fine art digital media courses at both RISD and Brown University. Her book, *The Computer in the Visual Arts*, has become a standard reference text. Roger Mandle, former Executive Director of the Qatar Museums Authority, described Spalter's book as, "a seductively articulate and illuminating introduction to the rapidly expanding world of the computer and art, design, and animation..."

Spalter was a long-time member of the Advisory Board of the Digital Art Museum (Berlin), and has also served on the editorial board of the *Journal of Mathematics and Art*, and the ACM SIGGRAPH Committee for the Distinguished Artist Award for Lifetime Achievement in Digital Art. She has a BA from Brown in Mathematics, Visual Art, and an independent major, as well as an MFA in Painting from RISD. Spalter is also a martial artist with a black belt in kenpo karate.



Anne Morgan Spalter, *Bora Bora—Palm Fronds*, 2013, 1080p HD digital video, 3min seamless loop

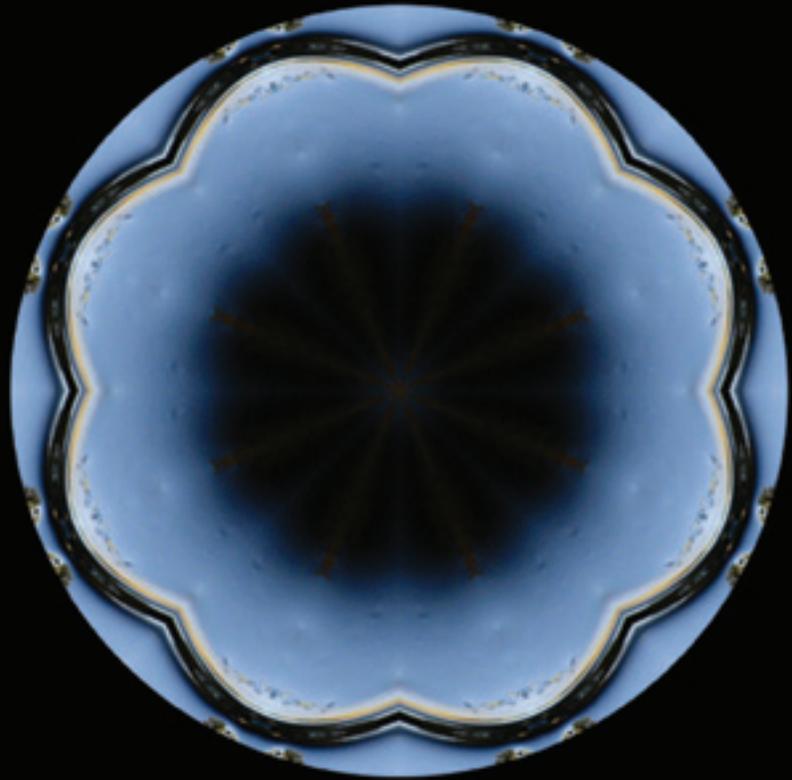
Leslie Thornton

Leslie Thornton is a Brown University Professor of Modern Culture and Media Studies and a world-renowned film and video artist, perhaps most famous for her film series *Peggy and Fred in Hell*. She also has a background in painting, displaced in 1976 by her engagement with time-based media. In 2009, she began a new series of gallery-oriented videos, *The Binocular Series*, which placed the discourse within fine art practice at its center.

There is a bold, elemental grace in the *Binocular Series* that belies the arduous production process. As Thornton told crane.TV interviewer Kevin McGarry,

There is a great deal of editing involved, you just don't see it because it does not appear in the form of cuts. Once I have the shot I want to work with, and this in itself may require a number of attempts over a period of time, the editing takes place in the exact framing I use of the animal, what actually shows up in the circle, and in the 50 to 100 on average variations I try out with digital effects before I settle on one. So the editing is in the digital effects, and you only see the result. It's not simple process-wise, though the image gives that impression. And that's what I want. It should look effortless; otherwise you're looking at the effort, not the image.

By showing original video of animals or other animate phenomena on one side of the frame and abstract, centripetal (or otherwise processed) video on the other, Thornton provides unexpected and insightful windows onto her subject's fundamental existence and habit within a time/space context, using representational (literal) and abstracted imagery of the exact same subject, side by side. She also works with the grid-circle tension by framing the original rectangular video with a doubled circular mask (a binocular, literally a grid of two circles). In her "Streams" video, Thornton abandons the binocular matte for a full-frame video image, but carries key aspects of her split-attention technique by filling the frame with recognizable but cryptic footage (a stream of water carrying bits of tar and oil, filmed at Los Angeles' La Brea Tar Pits) and selectively deforming the image through digital processing of small areas. The wonders of refracted, prismatic light that occur when oil, water and light intermingle are exaggerated by digital intervention. Frequently in her work, long shots with no camera motion create an intense focus and examine the environmental context and behavioral phenomena in close detail.





Biography

Leslie Thornton is an enormously influential artist and acknowledged pioneer in media. Her early works first addressed the interplay of cinema, video, installation and improvisation in a manner that prefigured contemporary media strategies.

She has exhibited worldwide at museums, festivals and institutions such as The Museum of Modern Art (MoMA) in New York City, The Centre Georges Pompidou in Paris, at the Whitney Biennial in New York City, Documenta, Moving Image Video Art Fair (New York City), Barbara Gladstone (New York City), Winkleman Gallery (New York City), the Rotterdam Film Festival, the New York Film Festival, and countless others. She has produced installations for capcMusée, Bordeaux, PS1/MoMa, and Track 16 in Los Angeles.

Thornton has had retrospectives at MoMA, RedCat (Los Angeles), Cinema Project Portland, Anthology Film Archives (New York City), the San Francisco Cinematheque, and the LA Film Forum.

Her work is in the permanent collections of MoMA, Galerie National du Jeu de Paume (Paris), Centre George Pompidou (Paris), and Fundacion Salamanca Ciudad de Cultura, and Fundacio la Caixa (Spain), among others.

She was one of the most broadly represented media artists in the Whitney Museum's millennial show "The Art of the Century," and was the youngest featured artist in their survey *Women Avant-garde Filmmakers in America*. Her work has been written about by a number of historians, critics and scholars, including Roberta Smith, Anne Landi, John Powers, Mary Anne Doane, Trinh T. Minh-ha, and was featured in Artforum's 50th Anniversary Issue in an article by media scholar Ed Halter.

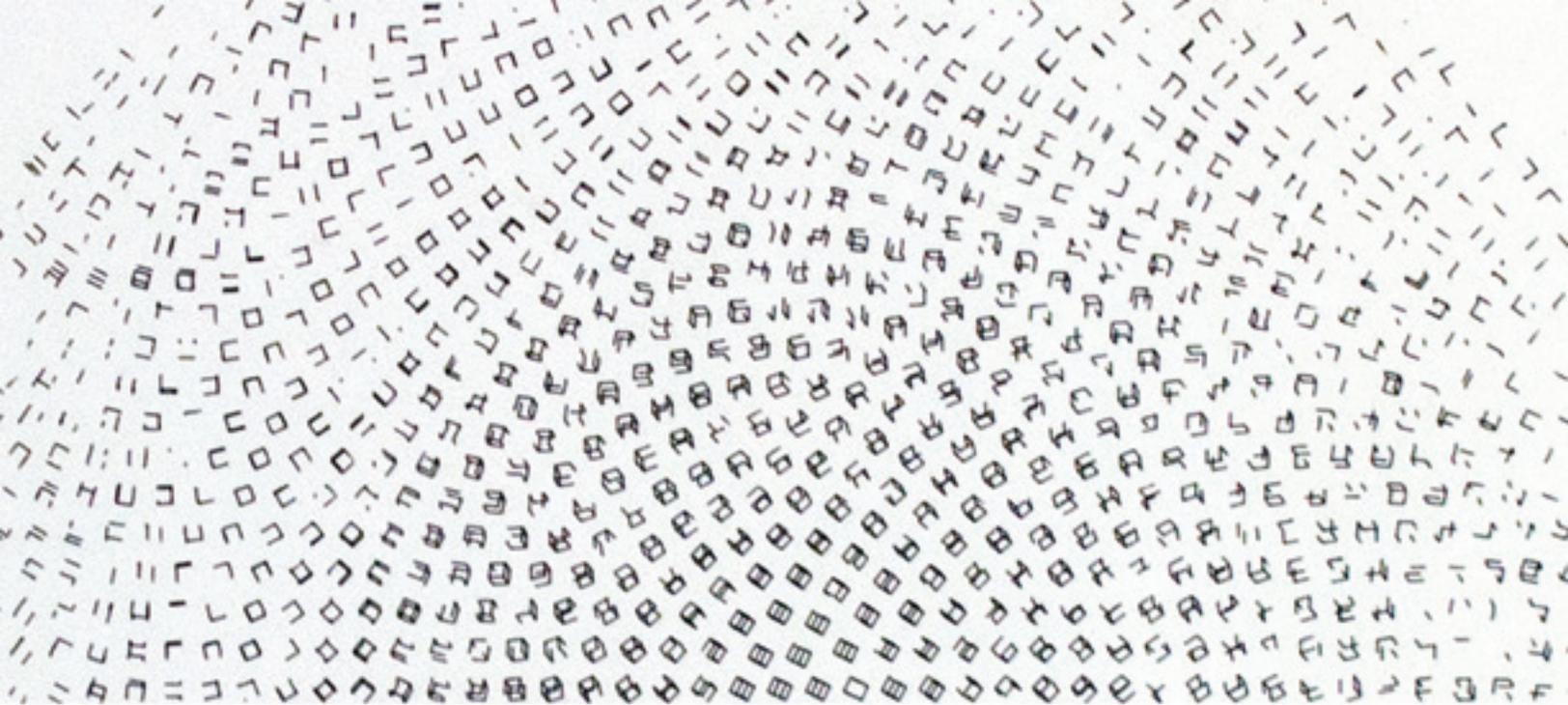
Her numerous prizes and awards include a Guggenheim, the Maya Deren Lifetime Achievement Award, three Rockefeller Fellowships, the first Alpert Award in the Arts for Media, and a nomination for the Hugo Boss Award. A Professor of Modern Culture and Media Studies at Brown University for over 25 years, Thornton has been instrumental in building one of the most distinctive media arts programs in the United States and has influenced an entire generation of media artists, critics and theorists.

LIST OF DIGITAL ART WORKS

- Jean-Pierre Herbert**, *Un cercle trop étroit, dansant*, 1995, plotter drawing, pen and sepia ink on Arches paper, 18 x 13.5 in
- Jean-Pierre Herbert**, *Untitled*, 2001, plotter drawing, pen and ink, 21.25 x 21.5 in
- Jean-Pierre Herbert**, *Un Cercle Trop étroit, Blue Tre's Pale*, 1995, plotter drawing, ink on paper, 22 x 32 in
- Jean-Pierre Herbert**, *Untitled*, 1997, pen and ink (plotter), 37 x 51.25 in framed
- Roman Verostko**, *Gaia Series, Psyche*, 1991, algorithmic pen, ink and brushwork with gold leaf triangle and custom seals of artist and wife, 24 x 40 in
- Freider Nake**, *Nr. 1 Serie 2.5-1*, 1967, color ink plotter drawing on white wove paper, 10 x 10 in
- Freider Nake**, *Nr. 2, Serie 2.5 - 5*, 1967, color ink plotter drawing on white wove paper, 10 x 10 in
- Mark Wilson**, *PSH5M*, 2002, archival inkjet on Museo rag paper, 35 x 47 in
- Mark Wilson**, *SK92*, 1992, plotter drawing on polyester film, 36 x 36 in
- Richard Rosenblum**, *Pirate Crab*, 1996, archival inkjet print, 30 x 40 in
- Edward Zajec**, *T.V.C. 10 34702 71*, 1971, india ink on ComPlot paper, 30 x 21 in
- Edward Zajec**, *Ram 1 V. 1*, 1968, india ink on ComPlot paper, 30 x 21 in
- Ben Laposky**, *Electronic Abstraction #4*, 1954-1956, oscilloscope, high speed film, photo paper, 16.5 x 13 in
- Ben Laposky**, *Electronic Abstraction #27*, 1954-1956, oscilloscope, high speed film, photo paper, 16.5 x 13 in
- Manfred Mohr**, *p.-300b*, 1980, plotter drawing, ink on paper, 27.5 x 27.5 in
- Manfred Mohr**, *Prog.156*, 1974, plotter drawing, ink on paper, 19.6 x 19.6 in
- Manfred Mohr**, *Scratch Code*, 1973, plotter drawing, ink on paper, 26 x 26 in
- Manfred Mohr**, *P-197*, 1977-1979, screenprint 15/1000, 47.7 x 47.8 in
- Manfred Mohr**, *P-159-R*, 1974, ink on paper, 23.6 x 23.6 in
- Manfred Mohr**, *P-181d*, 1975-1979, plotter drawing, ink on paper, 19.25 x 19.25 in
- Manfred Mohr**, *Tape 1, 107*, 1970, ink on paper, 19.6 x 19.6 in
- Leon Harmon and Kenneth Knowlton**, *Nude*, 1967, computer processed photograph, photo print from microfilm, 8.6 x 11.1 in
- Desmond Paul Henry**, *Untitled*, 1962, green, mint green, black biro on ultra smooth white card, hand embellishments, fine black lines and blue duplicator ink background shading, 8.26 x 10.23 in
- Desmond Paul Henry**, *Untitled*, 1962, black and green biro on ultra smooth white card, hand embellishments, black lines and blue duplicator ink background shading, 8.66 x 10.23 in
- Desmond Paul Henry**, *Androbulus*, 1962, drawing machine, white india ink on black cartidge paper, hand embellishments, 15.35 x 20.47 in
- Herbert Franke**, *Quadrante (Squares)*, 1969-1970, screenprint, 27.48 x 19.52 in
- Yoshiyuki Abe**, *Might be Legend III*, 1992, iris print, 9.8 x 13.8 in
- Corbin Walker**, *Untitled (DOC2)*, 2005, pigment inkjet print, 43 7/8 x 18 in
- Vera Molnar**, *Carres*, 1983, plotter drawing, ink on paper, 10 x 10 in
- Vera Molnar**, *Trapezes*, 1985, plotter drawing, ink on paper, 15 x 28 in
- Vera Molnar**, *Interruptions*, 1968-69, plotter drawing, ink on paper, 15 x 15 in
- Vera Molnar**, *Untitled*, 1969, plotter drawing, ink on paper, 22 x 22 in
- Henry Mandell**, *Study for Ten Dimensions*, 2009, ultrachrome pigment on paper, 60 x 31 in
- Henry Mandell**, *Belled*, 2009, ultrachrome pigment on paper, 44 x 23 in
- Sven Höglund and Bror Wilkstörm**, *Untitled*, 1979, ultrachrome pigment on paper, black and white computer graphic: silkscreen after plotter drawing, from the Artiste et Ordinateur portfolio 75/100
- Anne Morgan Spalter**, *Bora Bora Palm Fronds*, 2013, 1080p HD digital video, 3 min. seamless loop, Ed. of 3+AP
- Anne Morgan Spalter**, *Bora Bora Sunset*, 2013, 1080p HD digital video, 3 min. seamless loop, Ed. of 3+AP
- Anne Morgan Spalter**, *Bora Bora Glitter Palm*, 2013, 1080p HD digital video, 3 min. seamless loop, Ed. of 3+AP
- Anne Morgan Spalter**, *Topio Video Table feat. Bora Bora Lagoon*, 2013, 1080p HD digital video, 3 min. seamless loop, Ed. of 3+AP
- Anne Morgan Spalter**, *Bora Bora Blue Lagoon*, 2013, ink on vinylized paper decal print with embellishments, 10' diameter
- Anne Morgan Spalter**, *Mt. Otemanu*, 2013, ink on vinylized paper decal print with embellishments, 24' diameter, Ed. of 5+AP
- Anne Morgan Spalter**, *Stairs to the Sea*, 2011, processed image based on original charcoal drawing, archival print mounted on wood frame, 18 x 24 in
- Anne Morgan Spalter**, *Branches at Night*, 2011, processed image based on original charcoal drawing, archival print mounted on wood frame, 18 x 24 in
- Anne Morgan Spalter**, *Kaleidoscopic Cloud*, 2011, processed image based on original charcoal drawing, archival print mounted on wood frame, 7 x 9 in
- Leslie Thornton**, *The Animates: Oil and Water*, 2013, 2K video loop with sound, 8 min., Ed. of 2+AP
- Leslie Thornton**, *The Animates: La Brea Tar Pits*, 2013, 4K video loop, 3.5 min., Ed. of 2+AP
- Leslie Thornton**, *Binocular Series: Zebra 2*, 2013, 4K video loop, 3.5 min., Ed. of 2+AP
- Leslie Thornton**, *Binocular Series: Mandarin Duck*, 2013, HD video loop, 3.5 min., Ed. of 20+AP
- Leslie Thornton**, *Binocular Series: Flamingo*, 2012, HD video loop, 2 min., Ed. of 3+AP
- Leslie Thornton**, *LUNA 1905*, 2013, 2K video loop with sound, 5 min., Ed. of 3
- Leslie Thornton**, *Binocular Series: Black Parrot*, 2012, HD video loop, 4 min., Ed. of 5+AP
- Leslie Thornton**, *LUNA Sepia*, 2013, Archival pigment monoprint on cotton rag paper, 23 x 38 in
- Leslie Thornton**, *Binocular Series: Baboon*, 2012, Archival pigment monoprint on cotton rag paper, 13 x 18.8 in
- Leslie Thornton**, *Binocular Series: Tiger*, 2012, Archival pigment monoprint on cotton rag paper, 13 x 18.8 in
- Leslie Thornton**, *Binocular Series: Fish*, 2012, Archival pigment monoprint on cotton rag paper, 13 x 18.8 in
- Leslie Thornton**, *Binocular Series: Tiger Fish*, 2012, Archival pigment monoprint on cotton rag paper, 13 x 18.8 in
- Leslie Thornton**, *Binocular Series: Viper*, 2012, Archival pigment monoprint on cotton rag paper, 13 x 18.8 in
- Leslie Thornton**, *Binocular Series: Horse*, 2012, Archival pigment monoprint on cotton rag paper, 13 x 18.8 in



Leslie Thornton, *The Animates: Oil and Water*, 2013, 8 minutes, sound, 2K Video loop



DEDEE SHATTUCK GALLERY

