Drawn from a Score

Opening Reception:
Saturday, October 7, 2017, 2-5pm

On view through:
Saturday, February 3, 2018

Holiday Closures:
Nov. 10-11, 23-25; Dec. 18-Jan. 7, Jan. 15

Curated by David Familian

Featuring: Alison Knowles, Casey Reas, Channa Horwitz, David Bowen, Frederick Hammersley, Frieder Nake, Guillermo Galindo, Hiroshi Kawano, Jason Salavon, Jean-Pierre Hébert, John Cage, Leon Harmon & Kenneth Knowlton, Manfred Mohr, Nathalie Miebach, Rafael Lozano-Hemmer, Sean Griffin, Shirley Shor, Sol LeWitt, and Vera Molnar

Drawn from a Score features artists whose work emanates directly from a written, visual or code-based score. Ranging from event scores first developed by John Cage and Fluxus artists in the late 1950s to contemporary uses of code as a score for computational works, the exhibition includes drawings, sculptures, performances, video projections and computer-generated forms of art.

The exhibition begins with John Cage’s Fontana Mix (1958). In his seminal course at the New School for Social Research, Cage taught young artists how to write event scores using chance operations, found sounds, and everyday objects to produce live performances. The exhibition will feature a newly-commissioned electrified chessboard that simulates the one used in Cage’s first performance of Reunion (1968) — a chessboard that makes audible the movement of the chess pieces as a game is being played — underling his idea of “indeterminacy.” John Cage coined this term during a series of lectures he gave in 1956, in which he outlined how indeterminacy played a role in performances since the era of Bach. His description was, “a performance of a composition which is indeterminate of its performance is necessarily unique. It cannot be repeated. When performed for a second time, the outcome is other than it was. Nothing therefore is accomplished by such a performance, since that performance cannot be grasped as an object in time.”

The works in this exhibition bridge the gap between written scores and computer programs that use chance (and other computational techniques) to create non-repeating variations. The House of Dust (1971)—a collaboration between Fluxus artist Alison Knowles and the composer James Tenney that yielded the first computer-generated poem created in the programming language Fortran—will be represented by both static and live versions of the original score. Also included in the exhibition will be works by Manfred Mohr and Vera Molnar (among others), who also used Fortran to make plotter prints a few years after Knowles. Sol Lewitt’s site-specific installation, Wall Drawing 76 (1971), is created by following a set of written “instructions” (or a score, so to speak) written by the artist. Overseen by a draftsperson from the Sol LeWitt estate, LeWitt’s installation of graphite lines on a wall of the gallery will be rendered by several graduate students from the UC Irvine Department of Art; marking an important and once-in-a-lifetime opportunity for UC Irvine’s young artists.

Some of the more contemporary works in this exhibition use computer generated or real-time animation in projections. Los Angeles-based Casey Reas expands on Sol Lewitt’s instructions by writing computational scores to make infinitely mutable digital images on monitors. Israeli artist Shirley Shor’s Landslide (2004) uses computationally generated imagery to project virtual compositions on the physical surface of white sand, a constantly changing topography that alludes to geo-politics.

Drawn from a Score will be accompanied by a series of public events and/or performances. For more information about special events, please visit our website at beallcenter.uci.edu. This exhibition is supported by the generosity of the Beall Family Foundation.
Exhibition Artists and Artworks

(alist sections include one example of artwork, additional exhibition works can be viewed online)

Alison Knowles

The House of Dust, 1967 / dot-matrix printer, continuous print paper, and computer with code / dimensions variable

The House of Dust is the seminal 1967 poetry project created by Alison Knowles and James Tenney, in collaboration with a Siemens 4004 computer. An early example of a computer generated poem, the work creates stanzas by working through iterations of lines of code with changing words from a finite vocabulary list. The result is an unlimited number of stanza combinations, which are composed on the whim of the Fortran code originally written by the artist. To create this poetic code, Knowles produced four word lists that were then translated into the computer language and organized into quatrains according to a random matrix. Each of the four lists contains terms that describe the attributes of a house: its materials, location, lighting, and inhabitants. The computer program imposes a nonsensical ordering of subjects and ideas, which creates unexpected results. Hundreds of variations of houses are possible, as every version of the poem begins and ends with a different set of quatrains. Knowles’ collaboration with the computer demonstrates how language and human vernacular can have different meanings through structural and contextual shifts, and introduces the intricate mechanics of artificial intelligence.

Alison Knowles (b. 1933) is a visual artist known for her installations and performances which focus on visual, aural, and tactile elements. She is a founding member of the Fluxus group of avant-garde artists who assembled formally in 1962. Her work spans different disciplines from print-making and event scores to books, articles, performances, and sound works she has authored. She has been featured in numerous exhibitions and performances worldwide in venues such as the Museum of Contemporary Art (Los Angeles, CA), Guggenheim Museum (New York, NY), Whitney Museum (New York, NY), and Tate Modern (London, UK). She was born in New York City and received her B.F.A as an honors graduate in 1956 from the Pratt Institute (Brooklyn, NY). She has received countless other accolades and awards such as the Guggenheim Fellowship in 1968, Anonymous was a Woman Award in 2003, the Francis J. Greenburger Award in 2015, and an honorary doctorate degree from Pratt in 2015. In 2016, she had a forty-year retrospective at the Carnegie Museum of Art (PA). She lives and works in New York City, and continues to create event scores and experimental works.

This work appears courtesy of the artist
Casey Reas

Process 15, 2006 / text, custom software (black and white, silent), computer, two screens / dimensions variable

Process 15 is a software implementation of the instructions: “A rectangular surface filled with instances of Element 3, each with a different size and gray value. Draw a small, transparent circle at the midpoint of each Element. Increase the circle’s opacity while it is touching another element and decrease this value while it is not.” Following suit with the artist’s “Process Compendium” series, the imagery that appears on the exhibition display monitors is derived from software interpretations of written text that the artist provides. Says Reas, “Each Process is a short text that defines a space to explore through multiple interpretations. A Process interpretation in software is a kinetic drawing machine with a beginning but no defined end. It proceeds one step at a time, and at each discrete step, every Element (a simple machine that is comprised of a Form and one or more Behaviors) modifies itself. The corresponding visual forms emerge as the Elements change; each adjustment adds to the previously drawn shapes. During the last seven years, I have continuously refined the system of Forms, Behaviors, Elements, and Processes. The phenomenon of emergence is the core of the exploration and each artwork builds on previous works and informs the next. The system is idiosyncratic and pseudo-scientific, containing references ranging from the history of mathematics to the generation of artificial life.” Also included in the exhibition are KDOC (2017), and https://www.youtube.com/results?search_query=adventuretime (30 July 2015) (2015), both of which are custom software works.

Casey Reas’ (b.1972) software, prints, and installations have been featured in numerous solo and group exhibitions at museums and galleries in the United States, Europe, and Asia. Recent venues include the San Francisco Museum of Modern Art and the Art Institute of Chicago. Recent commissions have been awarded by the New World Symphony in Miami and the Whitney Museum of American Art. Reas’ work is in a range of private and public collections, including the Centre Georges Pompidou and the Victoria and Albert Museum. Reas is a professor at the University of California, Los Angeles. He holds a master’s degree from the Massachusetts Institute of Technology in Media Arts and Sciences as well as a bachelor’s degree from the College of Design, Architecture, Art, and Planning at the University of Cincinnati. Reas recently co-wrote and designed the book 10 PRINT CHR$(205.5+RND(1)); : GOTO 10 (MIT Press, 2013). With Ben Fry, Reas initiated Processing in 2001. He has also written and/or published several other titles. The artist lives and works in Los Angeles.

Reas’ work appears courtesy of the artist and bitforms gallery (New York, NY).
Horwitz’s “Sonakinatography” series began in 1968 as a notation system to track movement and time visually. A term of her own invention, “sonakinatography” combined the Greek words for sound, movement, and notation – three elements that ultimately informed her 50-year career. After setting her own framework and developing a primary language stemming from the boundaries of a grid, Horwitz created unique compositions based on various permutations of a count of eight beats. By using an associated path for each of the eight beats (and sometimes also a corollary color or symbol), she would chart her composition – oftentimes using countless forms such as colors, lights, persons, dancers, or instruments as her source material. Through this system, the artist developed a new language through which the “fourth dimension” could be visually represented. As she wrote in the magazine Flash Art in 1976: “I have created a visual philosophy by working with deductive logic. I had a need to control and compose time as I had controlled and composed two-dimensional drawings and paintings. To do this, I chose a graph as the basis for the visual description of time. I gave the graph a value: one inch became one beat or pulse in time. Using this graph, I made compositions that depicted rhythm visually.” Though her compositional strategy was often based on algorithmic rules, the artist maintained room for improvisation within her materials and execution – as the works could be born from numbers, colors, symbols, stamps, lettraset, felt tip pen, casein, ink, pencil, shades of one color, or eight colors – resulting in bold, geometric designs that captured the essence of synesthesia. Also included in this exhibition is Sonakinatography Composition 12 (1987-2011).

Channa Horwitz (1932-2013) was a contemporary artist based in Los Angeles, United States. Her works are often structured around linear progressions using the number eight and contain geometric motifs. Her works have been exhibited in The Museum of Modern Art (NYC), Salvatore Ala Gallery (Milan, Italy), and even at UC Irvine in 1974. She has been awarded numerous accolades such as the Guggenheim Fellowship Grant in 2013 and the National Endowment for the Arts Grant, Artist Fellowship in 1978. She studied at the Art Center School of Design (Pasadena, CA) in 1952, California State University, Northridge (CA) in 1963, and received her B.F.A. from California Institute of the Arts (Valencia, CA) in 1972.

Horwitz’s work appears courtesy of Ghebaly Gallery (Los Angeles, CA) and the Channa Horwitz Art Trust (Los Angeles, CA).
David Bowen

*infrared drawing device*, 2003 / four infrared sensors, charcoal, aluminum, wire, plastic, electronics / dimensions variable

Bowen’s *infrared drawing device* transforms the traditionally passive viewer into an active, site-specific collaborator. Through the use of four infrared sensors to determine a viewer’s location and movements, the device is activated by perceiving gestures – which it then translates into unique charcoal sketches on the wall. Much like a symphony conductor, subtle or grand gesticulations by the viewer can result in wildly different compositions through the device’s delicate, charcoal-wielding arm. The nature of human spontaneity and body language ensures that no two wall drawings will be the same, opening an endless array of iterations and interpretations on the part of both device and viewer. Offering new meaning to the concept of gestural painting or drawing, Bowen’s work forges a new relationship between human and mechanized action.

David Bowen (b. 1975) is a studio artist and educator whose work has been featured in numerous group and solo exhibitions nationally and internationally, including at venues such as Mattress Factory Museum of Contemporary Art (PA), Minneapolis Institute of Arts (MN), MAK Austrian Museum of Contemporary Art (Vienna), Ars Electronica (Linz), ZKM Center for Art and Media (Karlsruhe), Shanghai Contemporary Art Museum (Shanghai), and The National Art Center (Tokyo), among many others. He was the recipient of McKnight Visual Artist Fellowship in 2014-15, and the Joan Mitchell Fellowship in 2007, in addition to being awarded several residencies, grants, and festival honors. Bowen’s work is concerned with aesthetics that result from interactive, reactive and generative processes as they relate to intersections between natural and mechanical systems. He is currently an Associate Professor of Sculpture and Physical Computing at the University of Minnesota, Duluth.

*David Bowen’s work appears courtesy of the artist.*
Frederick Hammersley

*Enough is Plenty*, 1969 / computer generated ink drawing on paper / 15 x 20 inches

Along with Karl Benjamin, Lorser Feitelson, and John McLaughlin, Frederick Hammersley became recognized as one of “Four Abstract Classicists” in 1959, and was featured in an exhibition by the same name that year curated by critic Jules Langsner. First organized by the Los Angeles County Museum of Art (CA), “Four Abstract Classicists” was also shown at SFMoMA (CA), the Institute of Contemporary Art (UK), and Queen’s University (Ireland). The exhibition was instrumental in bringing global recognition to West Coast abstraction during a time that the East Coast had largely dominated the field with Abstract Expressionism – with Hammersley and his peers at the helm of a significant sea change in contemporary (and increasingly computational) art. In the late 1960s, Hammersley took a teaching position at the University of New Mexico, where the artist Katherine Nash and computer scientist Richard Williams collaborated to make ART 1, among the first computer programs anywhere designed to be used by visual artists. Upon discovering this resource, Hammersley learned how to punch cards to create shapes – which required following specific directions, and resulted in print-outs with a limited range of symbols; though ART 1 could form these characters into a small range of shapes. Fascinated by pushing the limitations of these constricted options, Hammersley produced a broad range of “drawings” using these computational resources – and at times, found ways to manipulate their inherent logic to emulate an errant human hand, thusly humanizing an otherwise machine-made product. Also included in this exhibition is *Jelly Centers* (1969), from the same series.

Hammersley (1919-2009) had been well trained in traditional painting and drawing, studying in Los Angeles at Chouinard Art Institute from 1940-42 and 1946-47 and at Jepson Art Institute from 1947-50. While serving as an Army sergeant in World War II from 1942-45 he was stationed in Paris and after he was discharged in 1945, took the opportunity to study at the École des Beaux-Arts. Hammersley experimented with a wide range of media throughout his long career, including sculpture, graphic design, lithography, serigraphy, collage, constructions, and even sun prints. He consistently drew from life, especially the figure, as well as from the Masters whom he studied in depth, indicating that although abstraction fascinated him, he always stayed grounded in looking at the world around him and maintained his ability to render what he saw. Even his non-objective drawings and abstract portraits are enriched by the sense of touch of his hand and the deep source of his imagery.

*These works appear courtesy of the Carl and Marilynn Thoma Art Foundation (Chicago, IL /Santa Fe, NM)*
Frieder Nake

22.10.65 Nr. 3, 1965 / plotter drawing on paper / 19 x 19 inches

Widely considered one of the founding fathers of computational art, Frieder Nake first began producing work in the early 1960s. Drawing significant influence from Max Bense’s idea of Information Aesthetics – which explores interconnectivity between design and information visualization – Nake explored a series of programming concepts ranging from machine language to PL/I, a third-generation language largely used in engineering and scientific endeavors. By exploring these programmatic languages, Nake found himself drawn to mathematical algorithms – which ultimately became the basis for his imagery. Says the artist of his practice, “The drawings were not very exciting. But the »principle« was!” This piece is from a series produced by the artist from 1963 to 1971, in which algorithmic artworks were created through the use of a computer, tape machine, and drawing machine. The intricate results simultaneously recall the geometric qualities of the De Stijl movement, the meticulousness of architectural renderings, and the micro-macro tensions often found in abstraction. Nake’s work can largely be broken down into four periods based on the programs or theories that captured his interest at the time. These include: compArt ER56 (1963-65), Walk-through-raster (1966), Matrix multiplication (1967/68), Generative aesthetics I (1968/69). In a somewhat abrupt move in 1971, the artist published the note, “There should be no computer art” in page, the Bulletin of the Computer Arts Society - in which he also announced that he would not continue producing computer art. He found that his political activism against capitalism was in direct conflict with his ability to contribute to the computer art genre. However, by the 1980s Nake began publishing work again.

Frieder Nake (b. 1938) has been a full professor of computer science at the University of Bremen, Germany, since 1972. Since 2005, he has also been teaching at the University of the Arts, Bremen. He is head of »compArt: Center of Excellence Digital Art«. His teaching and research activities are in computer graphics, digital media, computer art, design of interactive systems, computational semiotics, and general theory of computing. Nake was represented at all important international exhibitions on computer art. He has published in all the areas mentioned above, with a preference for computer generated images.

These works appear courtesy of the Carl and Marilynn Thoma Art Foundation (Chicago, IL / Santa Fe, NM)
Guillermo Galindo

Typical Secret Document, 2015 / Mixed Media on double-sided cut paper / 24 x 49.5 inches

Experimental composer, sonic architect, performance artist and Jungian Tarotist, Guillermo Galindo redefines the conventional boundaries of music and the practice of music composition. His broad interpretation of concepts such as musical form, time perception, music notation, sonic archetypes and his original use of sonic devices span through a wide spectrum of artistic works involving symphonic works, chamber acoustic composition, performance art, visual arts, computer interaction, electro-acoustic music, opera, film, instrument building, three dimensional installation and live improvisation.

Says Art Practical writer John Zarobell of this work, “Titled Typical Secret Document (2015), this two-sided print features architectural diagrams and cross-sections of the current border wall with four rows of dot patterns punched through, looking a little like a script written in Braille. On the other side is an abstract composition of lines that, when combined with the dot pattern, functions as another musical score. If necessity is the mother of invention, the barrier in this case is the mother of both illicit migration and art. There is no question that this work, created before the last presidential election, now generates a potent political statement. What Galindo achieves, through his printed flags and musical compositions, is to create art that manifests the presence of both truths and lies that generate this “Borderlandia.” This no-place, explored previously by artists such as Enrique Chagoya and Guillermo Gomez-Pena, cannot be mapped scientifically because it is a state of mind. The objects Galindo has collected from this no-man’s land, including empty water bottles and shotgun shells, may be repurposed as musical instruments, but they testify to a complex history in which militias shoot holes in water tanks meant to save lives while American border guards buy tacos from Mexicans through a hole in the wall.”

Galindo’s (b. unknown) work has been performed and shown at major music festivals, concert halls, museums and art exhibits throughout the United States, Latin America, Europe, and Asia and featured on BBC Outlook (London), Vice Magazine, (London), National Public Radio (U.S.), CBC (Canada), California Sunday Magazine and the New Yorker Magazine. He is the recipient of several prestigious grants and awards, including Creative Work Fund Grant (2016), and Center for Cultural Innovation Grant (2011), among many others. Most recently, his work was included in Documenta 14 in Athens (Greece) and Kassel (Germany).

This work appears courtesy of Magnolia Editions (Oakland, CA).
Unlike many of his peers, Hiroshi Kawano approached the practice of computational visual art from the practice of philosophy, as opposed to mathematics, engineering, or computer sciences. During his studies, Kawano found himself drawn to the teachings of German philosopher Max Bense; particularly his theories about measuring beauty using scientific rules. In an era when computers were first being used to apply algorithms and logic to complex (even abstract) problems, Kawano considered the possibility of using computers to “program” beauty – or popular notions of beauty. In experimenting with creating rules and algorithms for computers to generate “beautiful” artwork in the early 1960s, Kawano found that many of his geometric, colorful results could resemble the similarly angular paintings of Piet Mondrian. Upon making this connection, Kawano was inspired by the similar relationship between the artificiality of programming analysis and painting. In this work (as was the case in many others from this series), “Hiroshi Kawano did not simply digitize Piet Mondrian; it could be stated inversely that he was among the first to Mondrianize digital art” (as written by Claudio Rivera). Kawano went on to participate in the Tendencies 4 and 5 symposia and exhibitions at Zagreb in Croatia. He published many articles on the relationship between aesthetics, art, and Artificial Intelligence. Theories of the mind as information processors have interested him greatly. Also included in this exhibition by the artist is Simulated Color Mosaic (1972).

Kawano (1925-2012) is one of the most important pioneers of computer art, with his first publication dated September 1964 (in Japanese in the IBM Review). Kawano received his Ph.D. from Osaka University in 1986, and taught extensively throughout many universities in Japan. In 2010 the Center for Art and Media (ZKM) in Karlsruhe, Germany, acquired most of his works and his archive. A first retrospective exhibition was arranged at ZKM by curator Margit Rosen.

These works appear courtesy of the Anne and Michael Spalter Digital Art Collection (Providence, RI)
Jason Salavon

Rainbow Aggregator, 2013 / real-time software, internet connection, computer, large display / Ed. 3 + 2 AP / dimensions variable

Using software processes of his own design, Jason Salavon generates and reconfigures masses of communal material to present new perspectives on the familiar. Though formally varied, his projects frequently manipulate the roles of individual elements arranged in diverse visual populations. This often unearths unexpected pattern as the relationship between the part and the whole, the individual and the group, is explored. Reflecting a natural attraction to popular culture and the day-to-day, his work regularly incorporates the use of common references and source material. The final compositions are exhibited as art objects, such as photographic prints and video installations, while others exist in a real-time software context. In “Rainbow Aggregator,” the viewer can watch a hypnotic, continuous, real-time representation of “trending topics” sourced from Twitter and Google. The relentless conversion of global activity into a scrolling, over-saturated rainbow reflects our abundant data-stream through both literal (text) and abstract (color) means. There are approximately 30 trends shown and they are updated every few minutes as the piece transitions. This cycling from quiet color-solid to dense data to solid again composes the stream into visual stanzas reminiscent of orchestration while the colors themselves are derived directly from the tending data.

Salavon (b. 1970) earned his MFA at The School of the Art Institute of Chicago and his BA from The University of Texas at Austin. His work has been shown in museums and galleries around the world. Reviews of his exhibitions have been included in such publications as Artforum, Art in America, The New York Times, and WIRED. Examples of his artwork are included in prominent public and private collections including the Metropolitan Museum of Art, the Whitney Museum of Art, and the Art Institute of Chicago among many others. Previously, he taught at The School of the Art Institute of Chicago and was employed for numerous years as an artist and programmer in the video game industry. He is currently associate professor in the Department of Visual Arts and the Computation Institute at the University of Chicago. The artist is represented by Ronald Feldman Fine Arts (NY), Mark Moore Fine Art (CA), TAI Modern (NM), Inman Gallery (TX), Gaain Gallery (Seoul), and Kusseneers Gallery (Antwerp). The artist lives and works in Chicago (IL).

This work appears courtesy of the artist.
Jean-Pierre Hébert

*Continuous Line, 1977 / plotter drawing on paper / 17 x 11 inches*

A founding member of the Algorists – a group of computer artists formed in the mid-1990s – Jean-Pierre Hébert has been making plotter-based artworks since the 1970s. His work demonstrates that the computer genuinely creates new visual possibilities drawn from historical aesthetic investigations, while also charting new artistic considerations. Hébert’s works are best known for their intricacy – as the artist insists on a level of detail that oftentimes takes up to three days to “draw” (as opposed to merely “print”). In referring to them as drawings instead of prints, Hébert makes reference to the gradual building up of lines and textures – which create a unique artwork through the distinct interaction between pen and paper. Unlike the quick application of laser toner to paper, this style of rendering is methodical and systematic – another reason Hébert classified his works as sketches. Due to the variety of his chosen materials (including a variety of pen types, thin paper, canvas, and sometimes handmade Chinese or Japanese papers) his process yielded eclectic results in terms of ink diffusion and pen resistance. Also, the multi-layered designs he creates can lead to banding and ink buildup in certain areas. Due to the complex design of his drawings, the plotter’s pen could not leave the surface of the paper as it drew over the course of several days – or the risk of a dried out pen could occur. Given this, many of his works feature uninterrupted movement or lines from one corner of the sheet to the other, or even spiraling out from the center of his composition. For this reason Hébert’s first show was named “Sans lever la plume” (Without Lifting the Pen), and this work is titled appropriately, *Continuous Line*. Also included in this exhibition by the artist is *Recursive Diamond*, 1975-77.

Hébert (b. 1939) has been included in exhibitions throughout the U.S. and has achieved international recognition. Hébert is currently Artist in Residence at the Kavli Institute for Theoretical Physics at U.C. Santa Barbara and has been awarded a Pollock-Krasner and a David Bermant grants. He received the 2012 Siggraph Distinguished Artist Award for Lifetime Achievement in Digital Art. He lives and works in Santa Barbara, CA.

*This work appears courtesy of the Carl and Marilynn Thoma Art Foundation (Chicago, IL/Santa Fe, NM)*
John Cage

*Reunion, 1968* / a collaborative performance featuring John Cage, Marcel Duchamp and Teeny Duchamp, with electronic music by David Behrman, Gordon Mumma, David Tudor, and Lowell Cross; new music composed by Alex Joseph Lough / chessboard dimensions: 19 5/8 x 19 5/8 inches

John Cage was trained as a musician, and studied with Henry Cowell and Arnold Schoenberg in the early 1930s. He would go on to become a major influence on both music composition and visual art. Cage is best known for revolutionizing modern music through his incorporation of unconventional instrumentation and the idea of environmental music dictated by chance. Cage is famous not only for his radical works, like 4’33” (1952), in which the ambient noise of the recital hall created the music, but also for his innovative collaborations with artists like Merce Cunningham and Robert Rauschenberg. These partnerships helped break down the divisions between the various realms of art production, such as music, performance, painting, and dance, allowing for new interdisciplinary work to be produced. This movement ushered in a new form of art that artist Dick Higgins called “Intermedia,” which began in the late 1960s and further challenged the established definition of fine art. Through a collaboration with the John Cage Trust the Beall Center is thrilled to present a recreation of John Cage’s seminal electrified chessboard, built by Lowell Cross and first seen in his 1968 performance in Toronto with Marcel and Teeny Duchamp, *Reunion*. During this revolutionary performance, the artists sat across from one another and played a simple game of chess made audible by the chessboard, whose functions depended upon the covering and uncovering of its 64 photoresisters (one per square). Nine contact microphones were embedded so that the audience could hear the physical moves of the pieces on the board if the appropriate conjunctions of inputs, outputs, and player movements were (by chance) to occur. In this way, the chess players became improvisational composers. With 16 inputs (allowing four signals each from the four collaborating composers) and eight outputs (each directed to a loudspeaker system), the complexity of the sound environment enveloping the audience increased as the early part of the game progressed; it then diminished as fewer and fewer pieces were left on the board. In the current incarnation of this work, visitors to the Beall Center will be able to simulate this performance using a newly electrified chessboard from the John Cage Trust, and a unique, programmed score written by UCI Integrated Composition, Improvisation, and Technology (ICIT) Ph.D. candidate, Alex Joseph Lough.

John Cage (1912-1992) was born in Los Angeles, CA. Cage’s innovations with sound, instrumentation, performance, and composition all helped redefine music in the twentieth century. More specifically, his use of chance and the creative ways in which he utilized performers in his works helped inform and shape avant-garde movements like Neo-Dada, Fluxus, and Conceptual art.

*This work appears courtesy of the John Cage Trust (NY)*
Leon Harmon & Kenneth Knowlton

<<Nude>>, 1966 / laser print on paper mounted to canvas / 19 1/2 x 47 1/2 inches

Leon Harmon met his artistic collaborator - Kenneth Knowlton – while working for Bell Labs (an American research and scientific development company) in Murray Hill, NJ in the 1960s. Both artists expressed an interest in experimenting with the human perception of patterns – so together, they developed a technique that scanned, fragmented, and reconstructed an image using tiny patterns of symbols, printer characters, and dots. By deconstructing, and then subsequently reconstructing an image, Harmon and Knowlton were able to identify the minimum amount of information the human eye needed to interpret and resolve an image. The scanning process would identify 12 discreet levels of gray within an image, and replace a given area of the photo with a symbol or character that correlated to a certain value within the gray scale. This reclining nude image (specifically of famed choreographer Deborah Hay – originally photographed by Max Matthews), represents the first experiment using this set of instructions. The original computer output was a photograph and was given to E.E. David, who, when he became President Nixon’s science adviser, gave it to the Philadelphia Museum of Art. Says writer Nina Wenhart about this work, “What is interesting here is that neither Knowlton nor Harmon sought an image that would be either abstract or synthetic, or indeed invented or in any way transformed. Quite rightly, they considered that a common recognizable image would be the best vehicle to demonstrate the technique they had invented. On the other hand, their aim was also to produce something in the idiom of ‘modern art.’”

Kenneth C. Knowlton (b. 1931) developed the BEFLIX (Bell Flicks) programming language for bitmap computer-produced movies, created using an IBM 7094 computer and a Stromberg-Carlson 4020 microfilm recorder. He received his Ph.D. in Communications Sciences from M.I.T. in 1962 and worked in the Computer Techniques Research Department at Bell Labs. His work has been shown in juried exhibitions internationally. He lives and works in Florida.

Leon Harmon (1922 – 1983) was a researcher in mental/neural processing at Bell Labs. In 1966, Harmon and Kenneth C. Knowlton were experimenting with photomosaic, creating large prints from collections of small symbols or images. His “Studies in Perception 1” nude portrait collaboration with Kenneth Knowlton was printed in The New York Times on October 11, 1967 and exhibited as part of the Experiments in Art and Technology (EAT) competition at The Machine as Seen at the End of the Mechanical Age, held at the Museum of Modern Art in New York City from November 25, 1968 through February 9, 1969.

This work appears courtesy of the Anne and Michael Spalter Digital Art Collection (Providence, RI)
Manfred Mohr

*Cubic Limit*, 1973-4 / digital transfer of 16mm film / Ed. of 6, 2AP / dimensions variable, 4 minutes

Manfred Mohr is considered a pioneer of digital art. After discovering Prof. Max Bense’s information aesthetics in the early 1960s, Mohr’s artistic thinking was radically changed. Within a few years, his art transformed from abstract expressionism to computer generated algorithmic geometry. Encouraged by the computer music composer Pierre Barbaud whom he met in 1967, Mohr programmed his first computer drawings in 1969. In this work, Mohr demonstrates his fascination with the structures and systems relating to geometric shapes – namely, cubes – and analyzing the shapes into six and eleven dimensions. These interrogations result in two-dimensional expressions of multi-dimensional objects. The artist often refers to the cube as his “instrument” – a relationship perhaps derived from his background as a young musician – and that his algorithms are his means to “play it,” resulting in a kind of “visual music.” Says Mohr of his *Cubic Limit* video, “This short film was programmed in FORTRAN IV and run on a CDC 6400 computer. A DATAGRAPHIX 4460 microfilm camera rendered the data into a 16mm film. It was a very painful experience at that time because an adequate technology for making films with a computer was not yet developed.” Also in this exhibition by the artist is *Scratch Code* (1976), *P1411-I* (2010/2014), and a series of punch cards.

Mohr (b. 1938) has work in the collections of Centre Pompidou (Paris), Joseph Albers Museum (Bottrop), Mary and Leigh Block Museum of Art (Chicago), Victoria and Albert Museum (London), Ludwig Museum (Cologne), Wilhelm-Hack-Museum (Ludwigshafen), Kunstmuseum Stuttgart (Stuttgart), Stedelijk Museum (Amsterdam), Museum im Kulturspeicher (Würzburg), Kunsthalle Bremen (Bremen), Musée d’Art Moderne et Contemporain (Strasbourg), Daimler Contemporary (Berlin), Musée d’Art Contemporain (Montreal), Borusan Art Collection (Istanbul), McCrory Collection (New York), Esther Grether Collection (Basel), and the Thoma Art Foundation (Chicago). He has exhibited widely around the world, including in exhibitions at ZKM (Karlsruhe), MoMA (NY), Centre Pompidou (Paris), Whitechapel Gallery (London), National Museum of Art (Tokyo), SFMoMA (CA), and MoCA Los Angeles (CA), among many others. Among the awards he received are: ACM SIGGRAPH Distinguished Artist Award for Lifetime Achievement in Digital Art, 2013; [ddaa] d.velop Digital Art Award, Berlin 2006; Artist Fellowship, New York Foundation of the Arts, New York 1997; Golden Nica from Ars Electronica, Linz 1990; and Camille Graesser-Preis, Zürich 1990. He is represented by bitforms gallery (NY).

*These works appear courtesy of bitforms gallery (New York, NY)*
Miebach (b. 1972) has been featured in exhibitions internationally, including those at the Boston Arts Academy (MA), Craft and Folk Art Museum (CA), Frist Center for Visual Arts (TN), Mundaneum Museum (Belgium), Akron Art Museum (OH), Milwaukee Art Museum (WI), Crystal Bridges Museum of American Art (AR), and many others. Her work is in the collections of the DeCordova Sculpture Museum (MA), Spencer Art Museum (KS), Crystal Bridges Museum of American Art (AR), Wellington Management (MA), Fidelity Investment (MA), and various private collections. She is the recipient of a Pollock-Krasner Award (2011), the Virginia A. Groot Foundation Award (2016), TED Global Fellowship (2011), and the Artist Resource Trust Fund (2013), among others.

This work appears courtesy of the artist
Rafael Lozano-Hemmer

*Method Random 4, 2014 / Chromogenic print on Kodak Endura paper / Ed. of 3 / 32 x 55 inches*

Defining himself as an electronic artist, Lozano-Hemmer develops interactive installations that are at the intersection of architecture and performance art. His main interest is in creating platforms for public participation, by perverting technologies such as robotics, computerized surveillance or telematic networks. Inspired by phantasmagoria, carnival and animatronics, his light and shadow works are “antimonuments for alien agency”.

“Method Random” is a series of chromogenic prints that have been generated by computational methods that attempt to create randomness. Random number generators (RNG) are essential algorithms for a large number of applications from encryption and security to simulation, jury selection, double-blind trials, statistical sampling, game theory and many other applications. While the sum of all colors picked by different RNG algorithms generates a neutral gray, patterns can be discerned when massive number of pixels can be seen simultaneously. These prints show how human perception of organization can often spot the fundamental difficulty for computers to appear unpredictable.

Lozano-Hemmer (b. 1967) has recently had work shown at the San Francisco Museum of Modern Art (CA), the MUAC Museum in Mexico City (Mexico), and the Museum of Contemporary Art in Sydney (Australia), and he was the first artist to officially represent Mexico at the Venice Biennale with a solo exhibition at Palazzo Soranzo Van Axel in 2007. He has also shown at Art Biennials and Triennials in Havana, Istanbul, Kochi, Liverpool, Montréal, Moscow, New Orleans, Seville, Seoul, Shanghai, Singapore and Sydney. Collections holding his work include the MoMA (NY), Tate London (UK), AGO (Canada), CIFO (FL), Jumex (Mexico), DAROS (Switzerland), Borusan Contemporary (Turkey), MUAC (Mexico), 21st Century Museum of Art (Japan), MAG (UK), MUSAC (Spain), MONA (Tasmania), ZKM (Germany), MAC (Canada), and SAM (Singapore), among others. He is the recipient of an NEA Grant, a Rockefeller-Ford Fellowship, and the BAFTA British Academy Award for Interactive Art, in addition to many others.

This work appears courtesy of the Carl and Marilynn Thoma Art Foundation (Chicago, IL / Santa Fe, NM)
Sean Griffin

Aquarian X: Requiem for Pauline Oliveros 3: Textures of Bilitis, 2016-17 / ink on paper / 18 x 24 inches

Whether inventing a language or composing hysteric choreographic and choral methodologies used in films and installations, concert music works, film scores, operas, and devised music theater, to hundreds of numerically-conceived collages and drawings, intuitive and experimental music practices lie at the foundation of Sean Griffin’s works. Says the artist, “The first time I encountered the work of Pauline Oliveros, I was a composition student. By chance, I came across her piece scored for light and sound titled “To Valerie Solanas and Marilyn Monroe” in Recognition of their Desperation. As I read the instructions, the score brought to life, in my mind, a totally abstract, immersive, coloristic experience activated by a uniquely feminist sensitivity to the inner workings of improvisation. I suddenly felt allowed to incorporate into a composition many kinds of elements, concepts, and political meanings and I never thought about music performance quite the same way again.” His polyphonic strategies emerge from over 20 years of international productions in the living arts. With the performance and design consortium he founded in Los Angeles in 2010, Opera Povera, Griffin collaboratively combines ethnographic, archival, and historical research with critical artistic inquiry and improvisation. Mixing performance with sculptural sets, inspirational discards, assembled utilitarian objects and stock sets, he has been active throughout the US, Mexico, Asia, and Europe, directing, designing, arranging, recording, and conducting. Also featured in this exhibition by the artist is Aquarian X: Requiem for Pauline Oliveros 7: 16 Simultaneous Word Scores by Pauline Oliveros, Aquarian X: Requiem for Pauline Oliveros 12: Sonic Transmission from the 12th House, and Aquarian X: Requiem for Pauline Oliveros 16: Orchestral Vagina II.

Sean Griffin (b. 1968) works in many languages, styles, media and forms; his unique compositional works rely on interdisciplinary incongruities positioned at the intersection of sound, image, performance and the archive. With Opera Povera, Griffin has created new works with Charles Gaines, George Lewis, Anne LeBaron, Pauline Oliveros, and he is a longtime collaborator with Catherine Sullivan, Juliana Snapper, Aiyun Huang, and Stacy Ellen Rich. Griffin’s productions, recordings, live performances, and designs have been featured at MoMA (NY), Brooklyn Museum (NY), RedCat (CA), LACMA (CA), MAK Center at the Schindler House (CA), Berlin’s Volksbühne (Germany), Secession Vienna (Austria), EMPAC (NY), the 56th Venice Biennial (Italy), Chicago’s MCA (IL) and Trap Door Theatre (IL), Ostrava Days (Czech Republic), Tate Modern (UK), Royal Academy of Arts (UK), June In Buffalo (NY), Huddersfield Contemporary Music Festival (UK), Gwangju Biennial (South Korea), Seoul’s Festival BO:M (South Korea), Taipei’s Forum Music (Taiwan), and the 2017 Ojai Music Festival (CA). Griffin received a Ph.D. from UCSD and has taught at CalArts, UCSD, University of Chicago, and as Associate Professor at the University of Guanajuato, Mexico.

This work appears courtesy of the artist
Shirley Shor

*Landslide*, 2004 / custom software, sandbox, PC, and projector / 12 1/2 x 61 3/4 x 47 1/4 inches

Part of an emerging generation of new media artists, Shirley Shor employs technological processes in the service of larger issues related to human experience and fine art. Shor creates real-time computer generated installations, and environments that alter our experience of concepts such as conflict, language, and the passage of time. In Shor's works, the landscapes are a synthesis between the code and the territory - animated fields of color are in perpetual fluid motion, expanding, merging, collapsing, and reforming with movements and shapes that become metaphors for concepts such as conflict, language, and identity. Influenced by the politics of her native Israel, Shor endeavors to create a utopian moment wherein borders cease to provoke war.

*Landslide* (2004) consists of a sandbox and a real-time animation. The 'virtual map' is generated in real-time by software code and merge with the physical sculpted surface, creating a possible changeable topography. These landscapes are a synthesis between the code and the territory. The work is a direct conceptual continuation of another piece by Shor, titled *Becoming* (2011), and is an attempt to create an infinity map that must be reproduced and reconstructed. This kind of real-time map generates unique moments rather than being a product of the past or a representation of a fixed geographical taxonomy.

Shor (b. 1971) received her M.F.A in Conceptual Information Art from San Francisco State University (CA), and her Post B.A in Visual culture: criticism, and theory studies, from Camera Obscura, the School of Arts in Tel-Aviv, Israel. Shor’s work has been exhibited nationally and internationally. Recent shows include Yerba Buena Center for the Arts (San Francisco), SF CamerWork Gallery, Paule Anglim Gallery (San Francisco), Ars Electronica (Linz), Carl Solway Gallery (Cincinnati), RAM (Rotterdam), and Herzliya Museum of Art (Tel-Aviv). Shirley was selected for inclusion in the 2004 California Biennial in the Orange County Museum of Art. She received the 2003 Bay Area Murphy Award in fine arts. This work is in the permanent collection of the Berkeley Art Museum (CA). She is represented by Zemack Contemporary Gallery (Tel Aviv) The artist lives and works in New York, NY.

*This work appears courtesy of the Orange County Museum of Art (Newport Beach, CA); Museum purchase with funds provided through prior gift of Lois Outerbridge*
Sol LeWitt

**Wall Drawing 76, 1971 / black graphite drawn directly on the wall / 120 x 165 inches**

Re-Created by Karen Tepaz (Sol LeWitt Estate) with the assistance of UCI students Arthur Rodrigues, Lara Haddadin, and Beverly Siu

Sol LeWitt has long been credited as helping establish Conceptualism and Minimalism as the dominant art movements of the postwar era. Following his own service in the Korean War – during which he made posters for the Special Services - he visited shrines, temples and gardens in Korea and Japan, perhaps later informing the meditative, pattern-oriented qualities of his work. After being discharged, LeWitt moved to New York and balanced classes at the Cartoonists and Illustrators School (now known as the School of Visual Arts) with a design internship at Seventeen magazine. He joined the architectural office of I. M. Pei in 1955 as a graphic designer. What he learned from the architectural process convinced him to consider art as much an idea or a procedural blueprint that could be executed by others as a proprietary object of one person’s making. His deceptively simple geometric sculptures, drawings, and wall works were derived from a logical system, like a game; sometimes they defied logic so that the results could not be foreseen, with instructions intentionally vague to allow for interpretation. By allowing other people to participate in the creative process (i.e. studio assistants, preparators, etc.), LeWitt gave license to others to become artists of their own volition, and reminded art world critics that the agency of the artist is not inherently tied to personal execution. As an architect does not lay his/her own bricks, but is still considered an artist in his/her own right, LeWitt too relished the opportunity for a kind of unending collaboration. Said the artist, “The ideas need not be complex. Most ideas that are successful are ludicrously simple. Successful ideas generally have the appearance of simplicity because they seem inevitable.”

LeWitt (1928-2007) is often cited as one of the most important American conceptual artists of the 20th century. LeWitt’s works are found in the public collections of the Tate Modern (UK), the Van Abbemuseum (Netherlands), National Museum of Serbia (Serbia), Centre Georges Pompidou (France), Hallen für Neue Kunst Schaffhausen (Switzerland), Australian National Gallery (Australia), Guggenheim Museum (NY), the Museum of Modern Art (NY), Dia:Beacon (NY), The Jewish Museum (NY), MASS MoCA (MA), National Gallery of Art (D.C.), and the Hirshhorn Museum and Sculpture Garden (D.C.), among others. His work has been exhibited internationally; the LeWitt Estate is represented by Pace Gallery (NY).

*This work appears courtesy of Pace Gallery (NY) and the Sol LeWitt Estate*
Vera Molnar

*Interruptions*, 1968 / ink on plotter paper / 13 5/8 x 12 3/4 inches

A pioneer of computer art, the Hungarian artist Vera Molnar, born in Budapest in 1924 and a resident of Paris since 1947, has established a prominent position in the field of constructivist-concrete art but is virtually unknown in this country. Working in Paris alongside artists such as Jesus Rafael Soto, Victor Vasarely, and Francois Morellet, Vera Molnar was a founding member in 1960 of the Research Group for Visual Art (“Groupe de Recherche d’art Visuel” or GRAV) which espoused minimal, non-objective image-making, and which later gave rise to the Op-Art and Kinetic Art movements of the following decade. Still active today at 93, her remarkable practice encompasses painting, drawing and collage, computer drawings, photography, and installation. Beginning in 1968, the computer became a central device in the making of her paintings and drawings, allowing Molnar to more comprehensively investigate endless variations in geometric shape and line. Molnar learned the early programming languages of Fortran and Basic, and gained access to a computer at a research lab in Paris where she began to make computer graphic drawings on a plotter, several of which are included in this exhibition. Using the computer’s high calculation speed and signal capacity to arrive at a large number of variables, Molnar nonetheless insists upon the importance of hazard and chance in the final outcome. By injecting small programming “interferences,” she can offset predictable outcomes, as is this case in this piece. Other works by the artist included in this exhibition are *Interruptions* (1968), and three works from the *Des)Ordres* series (1976).

Molnar’s (b. 1924) work was the subject of a current retrospective, *Dis)Order* at Haus Konstruktiv, Zurich, Switzerland, co-organized with the Museum fur Konkrete Kunst, Ingolstadt, Germany. Other notable exhibitions include those at the Musée des Beaux Arts, Rouen (France), Kunsthalle Bremen (Germany), Fondation Salomon (France), Museum of Modern Art (NY), Grand Palais (France), and Centre Pompidou-Metz (France). In 2005, she was the recipient of the first D.velop Digital Art Award presented by the Digital Art Museum, Berlin, Germany. In 2007, Molnar was appointed Chevalier of Arts and Letters (Paris, France), and in 2011, she received the Republic of Hungary’s Order of Merit. Her work can be found in the following public institutions: Musée Nationale d’Art Moderne (France), Centre Pompidou (France), Bibliothèque Nationale (France), Kunsthalle Bremen (Germany), National Gallery (Hungary), the Victoria and Albert Museum (UK), the Worcester Art Museum (MA), the Wroclaw Contemporary Museum (Poland), and many other European collections.

*These works appear courtesy of Senior & Shopmaker Gallery (NY)*
About the Curator

David Familian is the Artistic Director and Curator at the Beall Center. He began working at the Beall Center in 2005 and was appointed Artistic Director and Curator in 2009. An artist and educator, he received his BFA from California Institute of the Arts in 1979 and his MFA from UCLA in 1986. For the past thirty years Familian has taught studio art and critical theory in art schools and universities including Otis College of Art and Design, Minneapolis College of Art and Design, Santa Clara University, San Francisco Art Institute and U.C. Irvine. Familian initiated Black Box Projects at the Beall Center, which produces collaborative exhibitions in which artists work with scientists and other experts in areas such as Cognitive Robotics, Computational Genetics, and Information Science. He has curated one-person exhibitions of artists Shih Chieh Huang, Golan Levin, Rafael Lozano-Hemmer, Chico MacMurtie, Jennifer and Kevin McCoy, Nam June Paik, and others. He has also curated numerous group exhibitions that explore topics such as data visualization, new forms of gaming and narratives, real-time data, interactive installations, and sound art. He currently teaches the Beall Center's Digital Arts Exhibition course at UC Irvine's Claire Trevor School of the Arts.

About the Beall Center for Art + Technology

The Beall Center is an exhibition and research center located on the campus of the University of California, Irvine. Since its opening in 2000, the Beall Center’s exhibitions, research, and public programs have promoted new forms of creation and expression. For artists, the Beall Center serves as a proving ground — a place between the artist’s studio and the art museum — and allows them to work with new technologies in their early stages of development. For visitors, the Beall Center serves as a window to the most imaginative and creative innovations in the visual arts occurring anywhere. The Beall Center promotes new forms of creative expression by: exhibiting art that uses different forms of science and technology to engage the senses; building innovative scholarly relationships and community collaborations between artists, scientists and technologists; encouraging research and development of art forms that can affect the future; and reintroducing artistic and creative thinking into STEAM (Science, Technology, Engineering, Arts, and Math) integrated learning in K-12 to Higher Education. The Beall Center’s curatorial focus presents a diverse range of innovative, world renowned artists, both national and international, who work with experimental and interactive media. Many of these artists have shown their works primarily within group exhibitions or have a limited number of solo exhibitions in the US. The Beall Center is committed to exhibiting these artists in a way that more fully expresses their individual body of work. We strive to present a direct connection between our programs and the larger trajectory of the history of video, installation art, kinetic and cybernetic sculpture. Our approach is not to exclusively emphasize the technological aspects of works, but to present experimental media projects that are equally strong aesthetically, conceptually and technically. The Beall Center received its initial support from the Rockwell Corporation in honor of retired chairman Don Beall and his wife, Joan; the core idea being to merge their lifelong passions - business, engineering and the arts - in one place. Today, major support is generously provided by the Beall Family Foundation.

About UC Irvine’s Claire Trevor School of the Arts

Times Higher Education ranked UC Irvine first among U.S. universities under 50 years old and fifth worldwide. Since its founding in 1965 as one of UC Irvine’s original schools, the School of the Arts (renamed for actress Claire Trevor in 2000) has become one of the nation’s leading educators in visual and performing arts. Awarded “Best Arts Organization” in Orange County 2014 by the Coast Community Awards, the School offers undergraduate and graduate degrees in Art, Dance, Drama and Music, a minor in Digital Arts and Digital Filmmaking, and one of the few university doctoral programs in Drama. The UCI Claire Trevor School of the Arts is located at 4000 Mesa Road, Irvine, CA 92617. For more information, please visit www.arts.uci.edu.
About Our Featured Lenders

The John Cage Trust (NY)
The John Cage Trust was established in 1993 as a not-for-profit institution whose mission is to gather together, organize, preserve, disseminate, and generally further the work of the late American composer, John Cage. Its founding trustees were Merce Cunningham, Artistic Director of the Cunningham Dance Foundation, Anne d’Harnoncourt, Director of the Philadelphia Museum, David Vaughan, Archivist of the Cunningham Dance Foundation, and Laura Kuhn, who from 1986 worked directly with John Cage, who also serves as its ongoing executive director. In 2008, Anne d’Harnoncourt was replaced by Margarete Roeder, long-time gallerist to both Cage and Cunningham; in 2009, Merce Cunningham was replaced by Melissa Harris, editor-in-chief of Aperture. In 2013, the John Cage Trust officially joined the ranks of Bard College in Annandale-on-Hudson, N.Y., at which time Robert Martin, Director of the Bard College Conservatory of Music, joined the board.

Orange County Museum of Art (Newport Beach, CA)
The Orange County Museum of Art is the premier visual arts organization in Orange County, California. The museum’s collection comprises nearly 2,500 objects of modern and contemporary art, with a concentration on the art of California from the early 20th century to works by local, national, and international artists working today. The museum opened in 1962 as the Balboa Pavilion Gallery by thirteen visionary women. By 1968 the institution became known as the Newport Harbor Art Museum and in 1972, moved to a nearby, larger location. Interest and support continued to grow, as did its collections and exhibitions and in 1977, the museum opened its doors in the current location on San Clemente Drive. In 1997 the museum was remodeled and renamed the Orange County Museum of Art and to this day, enjoys world-wide recognition for its award-winning education programs and ground-breaking exhibitions, many of which travel nationally and internationally.

The Anne and Michael Spalter Digital Art Collection (Providence, RI)
The Anne and Michael Spalter Digital Art Collection (Spalter Digital), Providence, RI, is one of the world’s largest private collections of early computer art, comprising of over 400 works from the second half of the twentieth century. Spalter Digital, which focuses on plotter drawings but includes other 2D media as well as sculpture and 16mm film, is home to major and iconic examples from key artists in the field. Spalter Digital has loaned work to the Museum of Fine Arts (Boston), the Museum of Modern Art (New York), the Victoria and Albert Museum (London), the Fondazione Bevilacqua La Masa (Venice), the Daelim Museum (Seoul), and others. Anne Spalter is a digital mixed media artist and academic who founded Brown’s and RISD’s digital fine arts programs in the 1990s. She is the author of The Computer in the Visual Arts (Addison-Wesley, 1999) and is on the board of the New York Foundation for the Arts (NYFA). Michael Spalter is the chairman of the board of the Rhode Island School of Design (RISD) and a board member of the American Friends of the Louvre. He is on the advisory boards of Harvard University’s cultural entrepreneurship program and the Nantucket Project. In 2017, Michael was tapped for the Whitney Museum of American Art’s inaugural Digital Art Acquisition Committee.

The Carl & Marilynn Thoma Art Foundation (Chicago, IL / Santa Fe, NM)
The Carl & Marilynn Thoma Art Foundation recognizes the power of the arts to challenge and shift perceptions, spark creativity and connect people across cultures. We lend and exhibit artworks from our collection and support innovative individuals and pivotal initiatives in the arts. Carl and Marilynn Thoma have been collecting art since 1975. They believe passionately in the power of art to enrich life and to deepen understanding of the cultures, places and times of which we are a part. In 1986 the Thomas established a family foundation to fulfill their broad passion for philanthropy. Inspired to make contributions with wide-ranging, yet personal impact, in 2014, the Thomas went on to found the Carl & Marilynn Thoma Art Foundation to distinguish their initiatives in, and support of, visual art. As their collections have evolved, they have contributed increasingly with their personal involvement and financial support to the development of exhibitions, symposia and publications, the formation of fellowships and awards, and the endowment of professorial chairs and curatorial positions. The Foundation maintains offices in Chicago (IL), and Santa Fe (NM) – where Art House (the foundation’s exhibition space) is open to the public.
**Drawn From a Score Fact Sheet**

**Exhibition:**
Exhibit Dates: October 7, 2017 – February 3, 2018; Curated by David Familian

Featuring: Alison Knowles, Casey Reas, Channa Horwitz, David Bowen, Frederick Hammersley, Frieder Nake, Guillermo Galindo, Hiroshi Kawano, Jason Salavon, Jean-Pierre Hebert, John Cage, Leon Harmon & Kenneth Knowlton. Manfred Mohr, Nathalie Miebach, Rafael Lozano-Hemmer, Sean Griffin, Shirley Shor, Sol LeWitt, and Vera Molnar

**Events:**
- **Opening Reception:** Saturday, October 7, 2017, 2pm – 5pm
  FREE Admission

- **Drawn From a Score: A LASER Talk About Artists Using Scores:** Monday, October 9, 2017, 5:30-7:30pm
  The Cove at UCI Applied Innovation
  5141 California Ave., #250
  Irvine, CA 92617
  *A panel discussion produced in association with Leonardo International Society for the Arts, Sciences, and Technology; a full speaker lineup will be available on beallcenter.uci.edu. The Beall Center’s LASER Talks series for 2018 is generously funded by the UCI Illuminations fund.*

- **STEAM Educators Luncheon:** Saturday, October 21, 11am-4pm
  FREE with registration; available online

- Additional performances and special events to be announced online. Join our mailing list at www.beallcenter.uci.edu.

**Gallery Hours:**
Monday - Saturday: 12pm – 6pm
Closed: Sundays
Holiday Closures: Nov. 10-11, 23-25; Dec. 18-Jan. 7, Jan. 15
Free Admission. Public is Welcome

**Location:**
712 Arts Plaza, Claire Trevor School of the Arts, UC Irvine, Irvine, CA 92697

**Parking:**
Student Center Parking Structure, at Campus Drive and West Peltason, Irvine, CA 92697
Mesa Parking Structure, at Mesa Drive and University Drive, Irvine, CA 92697

For maps, driving directions and parking information go to: [http://www.parking.uci.edu/maps/imap.cfm](http://www.parking.uci.edu/maps/imap.cfm)

**More Info:** [www.beallcenter.uci.edu](http://www.beallcenter.uci.edu)

**Note to Editors:** Images may be requested from Catlin Moore: [CMOORE@UCI.EDU](mailto:CMOORE@UCI.EDU), 949-824-6206