KINETICA 3

abstraction | animation | music

featuring

HY HIRSH AND THE FIFTIES

JAZZ AND ABSTRACTION IN BEAT ERA FILM

premiering

JORDAN BELSON'S BARDO

presented by The iotaCenter

KINETICA 3 SCHEDULE

University of Southern California	Los Angeles, CA	August 17, 2001
The Pacific Film Archive	Berkeley, CA	October 2 & 9, 2001
The Museum of Modern Art	New York, NY	October 29-30, 2001
Cinematheque Ontario	Toronto, Canada	November 21 & 28, 2001
Harvard Film Archive	Cambridge, MA	Fall, 2001
High Museum of Art	Atlanta, GA	February, 2002
Anthology Film Archives	New York, NY	2002
Northwest Film Forum	Seattle, WA	2002
The National Gallery of Art	Washington, DC	2003

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The films of Hy Hirsh were preserved by The iotaCenter under a grant from The National Film Preservation Foundation, with additional support from The Academy Film Archive and The Whitney Museum of American Art. Thanks to the NFPF for their ongoing support of our preservation activities which made the presentation of many of these films possible.

The Los Angeles premiere of KINETICA 3 is co-sponsored by the Division of Animation and Digital Arts, School of Cinema-Television, University of Southern California.

The iotaCenter gratefully acknowledges the following for permission to screen the works in KINETICA 3:
Angie Pike and The Creative Film Society, The Estate of John and James Whitney, Anthology Film Archives, The Harry Smith Archives, Canyon Cinema, Stephen Arthur, Jordan Belson, Robert Breer, Chris Casady, Sky David, Mar Elepaño, Paul Glabicki, Al Jarnow, Patricia Marx, Ernie Pintoff, Joost Rekveld, Richard Reeves, Bob Snyder, Cecile Starr, Ying Tan, Ed Zajec.

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Welcome to Kinetica 3

a traveling exhibition of abstraction in the film and video arts.

The third in our series of KINETICA exhibitions features the work of two artists in particular, Hy Hirsh and Jordan Belson.

Hy Hirsh, a significant presence in the avant-garde film scene of the '50s, is virtually unknown today. His films have been practically unavailable for decades and consequently rarely seen. The rediscovery of this unique artist began with an extensive preservation project which is described in the article on page 12. To present Hirsh's work in the context of his time, KINETICA 3 features other key abstract works from the '50s, five of which also underwent preservation work especially for this program: John Whitney, Sr.'s *Catalog,* James Whitney's *Yantra,* Harry Smith's *Film No. 3,* Patricia Marx's *Things to Come,* and Mary Ellen Bute's *Mood Contrasts.*

Since the late 1940s, Jordan Belson has made a series of extraordinary films and is one of the true masters of the art. In addition to his early films from the fifties, *Mandala* and *Caravan*, we are particularly proud to present the premiere of his newest work, *Bardo.* We've had the pleasure of working with Jordan over the past few years, supporting the production of his new works and preserving his older works. We're currently working on a comprehensive video compilation for release on VHS or DVD.

Although some of the other works in our "Contemporary Program" go back as far as the '60s, they are not presented as historical curiosities. Unlike the technology used in their creation (which has long since been rendered obsolete by newer developments), these works do not loose their value over time. We don't subscribe to the idea that phrases for describing technologies, such as "cutting-edge" and "state of the art" can be applied to aesthetic activities.

We take our work in art pretty seriously, but hopefully not *too* seriously. As evidence that even serious artists can laugh at themselves, we've included a hilarious send-up of abstract films by Mel Brooks and Ernie Pintoff called *The Critic.*

To be notified of future screenings, please join our mailing list. (Sign up at www.iotacenter.org)

I hope you enjoy the program and we'll see you at KINETICA 4.

Larry Cuba, Founder
The iotaCenter

KINETICA 3

ABSTRACTION | ANIMATION | MUSIC

Hy Hirsh and the Fifties
Jazz and Abstraction in Beat Era Film

ROBERT BREER
A Man and His Dog Out for Air (1957) 3 min.

HY HIRSH
Chasse des Touches (1959) 4 min.

JORDAN BELSON
Caravan (1952) 3.5 min.

HY HIRSH
Eneri (1953) 7 min.

PATRICIA MARX
Things to Come (1953) 3 min.

HY HIRSH
Autumn Spectrum (1957) 7 min.

SHIRLEY CLARKE
Bridges Go Round (1958) 3.5 min.

MARY ELLEN BUTE
Mood Contrasts (1956) 7 min.

HARRY SMITH
Film No. 3 (1949) 3.5 min.

HY HIRSH
Scratch Pad (1961) 7 min.

JOHN WHITNEY, SR
Catalog (1961) 7 min.

JORDAN BELSON
Mandala (1953) 3 min.

JAMES WHITNEY
Yantra (1957) 8 min.

HY HIRSH
Défense d'Afficher (1958) 8 min.
La Couleur de la Forme (1961) 7 min.

BARDO and the
Contemporary Program

CHRIS CASADY
Pencil Dance (1988) 3 min.

ED ZAJEC
Orphics 6.1 (1997) 3 min.

PAUL GLABICKI
Object Conversation (1985) 10 min.

RICHARD REEVES
Linear Dreams (1997) 7 min.

LARRY CUBA
Calculated Movements (1985) 6 min.

JOOST REKVELD
IFSfilm (1991) 3 min.

AL JARNOW
Cubits (1978) 4 min.

MAR ELEPAÑO
Winter (1984) 4 min.

ERNIE PINTOFF/MEL BROOKS
The Critic (1963) 5 min.

BOB SNYDER
ICRON (1978) 10 min.

YING TAN
Elements in Transformation #1 and #2
(1998) 3 min.

STEPHEN ARTHUR
Transfigured (1998) 5.5 min.

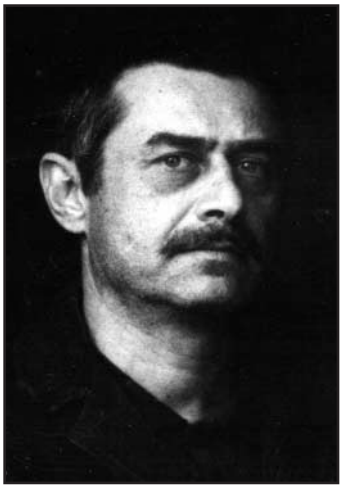
SKY DAVID
Luma Nocturna (1974) 4 min.

JORDAN BELSON
Bardo (2001) 13 min.

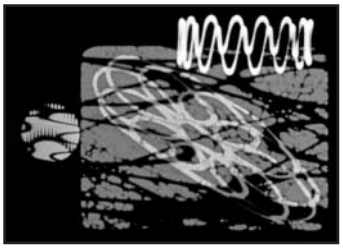
Hy Hirsh & The Fifties

Jazz and Abstraction in Beat Era Film

By Dr. William Moritz

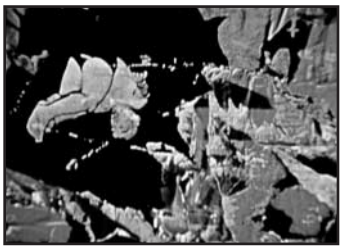


Hy Hirsh



Eneri

Autumn Spectrum



Defense d'Afficher

KINETICA 3 celebrates the little known San Francisco "Beat Generation" film scene. Primary among the film-makers, the charismatic Hy Hirsh had been a professional cinematographer at Columbia in Hollywood during the 1930s. He provided crucial assistance to Harry Hay, Roger Barlow and LeRoy Robbins as they made their 1937 experimental film, *Even as You and I.* Hirsh also worked as a still photographer, and eventually moved to San Francisco to be the official photographer for the DeYoung Museum.

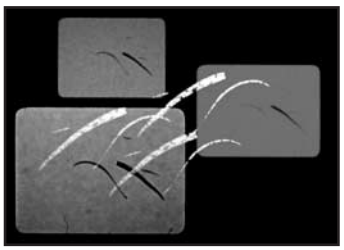
Hirsh was a technophile, and he acquired new inventions such as the magnetic tape recorder (which became available shortly after WWII), which he would use to create his soundtracks. He built an optical printer to do his own special effects, matting and color printing processes. Hirsh also made pioneering use of oscilloscope patterns (images filmed from a cathode-ray tube) as a source of abstract figures which were then colored and multiplied through the use of the optical printer.

Hirsh moved to Paris where he spent the last years of his life. When he died in Paris in 1961, some dozen women appeared at his funeral, all convinced that they were the love of his life — an event which is said to have inspired Ingmar Bergman's film *Now About These Women.*

Hirsh died of an apparent heart attack behind the wheel of his car and the French police, upon discovering cannabis in one of his film cans, impounded most of his films for several years, during which time a number of the originals were lost.

Using the best of the surviving materials, The iotaCenter, with a grant from The National Film Preservation Foundation and assistance from The Academy Film Archive, has preserved five of these six Hirsh films presented in KINETICA 3:

Eneri ("Irene," the name of one of his girlfriends, spelled backwards), a dazzling display of oscilloscope patterns with a soundtrack of African drumming; *Autumn Spectrum*, a serene look at Amsterdam reflected in the waters of its own canals, accompanied by a mellow jazz score; *Défense d'Afficher* ("Post No Bills"), a lively study of posters littering Parisian walls, synchronized with hot, frenetic experimental jazz; *Chasse des Touches* (*Chasing Touches*), an abstract expression made by moving the fingers through a tray with layers of colored oil, set to Thelonious Monk's cool jazz.

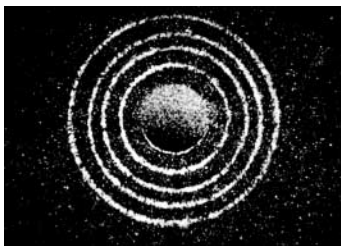


Chasse des Touches

Scratch Pad

La Couleur de La Forme

Harry Smith and his Bop City Mural
Photograph by Hy Hirsh (1952)



Mandala, Jordan Belson

Scratch Pad and *La Couleur de la Forme* (*The Color of Shape*) contain elaborate optically-printed passages that combine layers of imagery in surrealist juxtapositions (kittens and football players the same size on the same field, a woman with racing cars zooming through her body, etc.) along with Hirsh's hand-scratched abstractions and geometric animations — again set to contemporary jazz scores.

Hirsh left an indelible legacy in San Francisco through his generosity to young artists. He taught film-making fundamentals and loaned equipment to a number of young artists who wanted to become film-makers, including James Broughton, Sidney Peterson, Jordan Belson and Harry Smith.

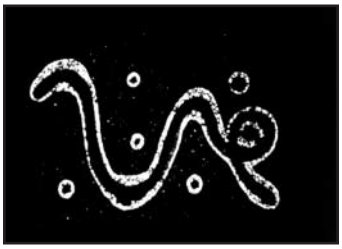
Belson and Smith both studied painting in college, lived in North Beach (ground zero for the Beat movement), and shared a mystical sensibility. Belson painted the façade of the famous City Lights bookstore where the great Beat writers (Ginsburg, Kerouac, Patchen, Ferlinghetti, etc.) hung out and proselytized for a Zen Buddhism.

Jazz clubs like Bop City featured live music until late at night, and Harry Smith sometimes projected his abstractions (hand-painted directly onto the filmstrip) on the wall while the band played, as a kind of "light show." Using Hirsh's multi-speed projector, Smith could modulate the images to fit the jazz improvisations. Smith also painted large abstract murals on the walls of Bop City, so his art was present even when he wasn't.

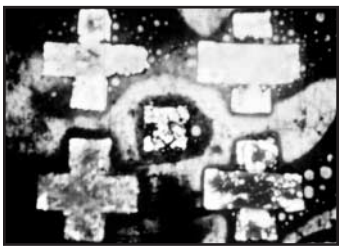
Jordan Belson also tried to preserve his painterly values in his early films by using long scrolls of paper on which hundreds of sequential images could be painted. During shooting, numerous different effects could be created by back-lighting, additional texturing with a second paper, etc. When watching his *Mandala* one senses the sacred aura of the circle of concentration, and the Indonesian gamelan music supports the images brilliantly. By contrast, his *Caravan* embodies the "on the road" spirit of the beats evoked by its lively imagery and energetic jazz score.

Harry Smith made seven films in San Francisco. The first three were hand-painted on film frames, and loosely synchronized to Dizzy Gillespie's jazz. The iotaCenter recently restored Film No. 3 with its jazz soundtrack, presented here in KINETICA 3.

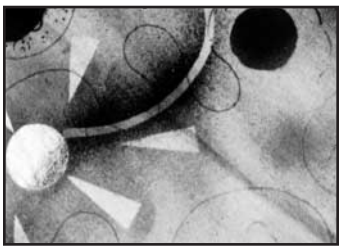
The painter Patricia Marx (who emigrated to San Francisco from "down under") also made films with Jordan Belson's technical help. *Things to Come* cleverly synchs close-ups of details from Marx's paintings to Dizzy Gillespie jazz.



Caravan, Jordan Belson

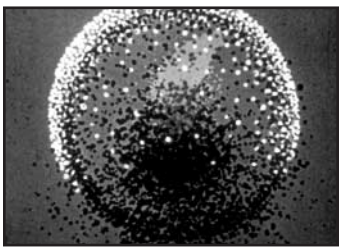


Film No. 3, Harry Smith



Things to Come, Patricia Marx

Catalog, John Whitney



Yantra, James Whitney

"Although the films of Hirsh, Belson and Smith appear in KINETICA 3 as finished pieces, it is important to realize that they were part of a continuum of imagery that appeared not just on film screens, but on the walls of San Francisco's cultural venues, in the pages of local avant-garde publications, and on stages behind improvisational jazz combos. These images provided the visual lexicon of the Beat Generation, and were as innovative, provocative and influential as the abstract expressionism that was establishing dominance in the world of painting. These films demonstrate a great affinity with the experimentalism of the modern jazz that was so frequently recruited to serve as a score."

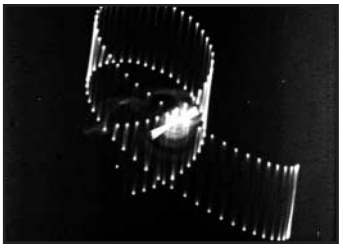
— Michael Friend

In Los Angeles, the brothers John and James Whitney had begun making abstract films in the early 1940s. In 1961, John Whitney presented *Catalog*, an index of effects that could be produced with a new system he developed, a computerized animation camera that could perform intricate superimpositions creating a new visual vocabulary that would become known as "motion control." Ornette Coleman jazz provided the aural component.

"*Catalog* stands between his work on *Vertigo* and the Stargate sequence of *2001: A Space Odyssey*. He created the title sequences for *Vertigo* with a mechanical pantograph system. The Stargate sequence, created by others, used ideas drawn from John's patented motion-control system. The mechanical gun director he used to build the "cam machine" was based upon Claude Shannon's work on fire control systems in the 1940's. *Catalog* becomes a stepping stone to John's insights into the art form he later called Digital Harmony — an art that can be realized only through digital technology."

— Michael Whitney

The younger brother James had studied as a painter and was deeply attracted to mystical concepts from the ancient Buddhism of Tibet to modern interpretations of Krishnamurti and Jung's archetypal imagery. James' *Yantra* (a Sanskrit word for "machine," especially a meditation machine like a prayer wheel or mandala) was created entirely with hand-drawn images, mostly intricate dot patterns. Not only did he animate the complex movements, but he also hand-developed and solarized much of the film to create aleatory irregular textures. The music is a pioneer electronic score, *Cain and Abel*, by the Dutch composer Henk Badings, which Jordan Belson coupled to the imagery for the Vortex Concerts projected on the dome of Morrison Planetarium in the late 1950s.



Mood Contrasts, Mary Ellen Bute

Bridges Go Round, Shirley Clarke

A Man and His Dog Out for Air
Robert Breer

The energetic experimental mood of the West Coast Beat Generation was paralleled on the East Coast by an equally dynamic movement. Mary Ellen Bute's color musical shorts were widely screened in regular first-run movie theaters, including Radio City Music Hall. *Mood Contrasts* is another very early example of the use of oscilloscope patterns, but unlike those found in Hirsh's films, Mary Ellen Bute's wave-forms are "uncontrolled," shimmering figures that function as "dancers," with conventional animation providing the background.

Shirley Clarke made two versions of *Bridges Go Round*, one with an electronic music score and one (presented in KINETICA 3) with a Teo Macero jazz guitar track. The surreal images of several layers of New York bridges racing past each other remain the same. And Robert Breer's charming *A Man and His Dog Out for Air* charts the quintessential New York walking-the-dog experience in an elliptical free-hand animation that mixes suggestions of gestures and fragmental sketches that the lucky viewer may complete.

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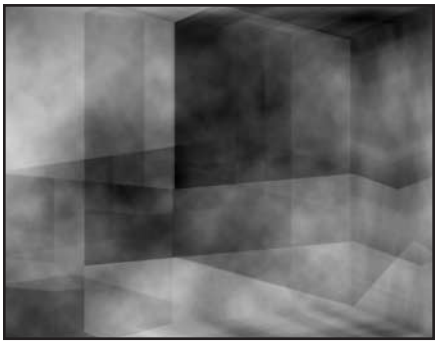
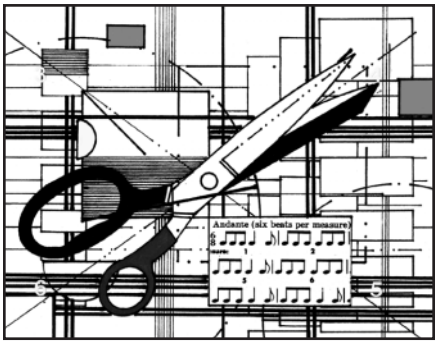
Pencil Dance (1988) 3 min.
Chris Casady

The elements of this dance are simple: white shapes, a black background, and an updated, upbeat rendition of Sergei Prokofiev's *Peter and the Wolf*. This ballet of organic and geometric shapes proves that energy, excitement, humor, and spirit can be evoked by a purely abstract black and white film.



Orphics 6.1 (1997) 3 min.
Ed Zajec

Zajec established a correspondence between time and space by paralleling the role of meter and rhythm in music with the role of grid and figure in picturing.



Object Conversation (1985) 10 min.
Paul Glabicki

Scissors, chairs, an hourglass, a clock, a barbell, an arch, ladders, a boxing ring, and a piano are among the objects that present, define, discuss, demonstrate, re-define, and progressively re-invent themselves in this film.

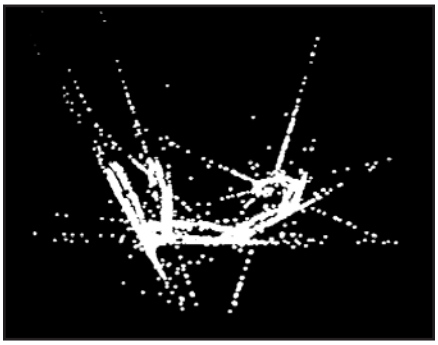
Linear Dreams (1997) 7 min.
Richard Reeves

Both sound and images were scratched directly on film, in the spirit of Norman McLaren. Reeves is well worthy of the Master — producing rushing lines that transform into stellar constellations, to semi-realistic animals, and back again, slowing down now and then to give the eyes a few seconds of rest. Dazzling colors and a thumping heartbeat give the film a joyous feeling.

Calculated Movements (1985) 6 min.
Larry Cuba

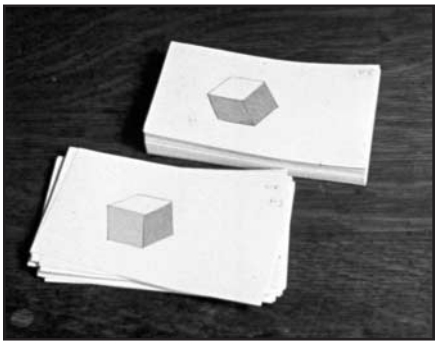
Algorithmically-generated choreography of geometric form. What's the relationship between mathematical structure, visual perception and music?

"I thought I was watching a transmission from another galaxy." — Jordan Belson



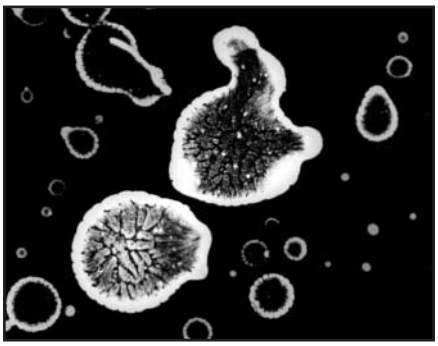
IFSfilm (1994) 3 min.
Joost Rekveld

An elegant exercise in algorithmically-generated dot patterns. A fully-dispersed wide field of random points of light coalesces into discernable shimmering shapes, disperses again and repeats the process. An exploration into the perceptual tension between the chaotic and the ordered.



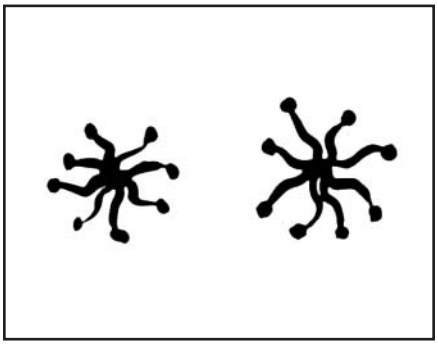
Cubits (1978) 4 min.
Al Jarnow

Like Paul Glabicki, Jarnow delights in setting up elaborate systems for each film in order to exploit permutations of his subjects, which range from celestial phenomena to seashells and tides at the beach. In the case of *Cubits*, the protagonists are indeed cubes, lovingly drawn by Jarnow in careful choreography.



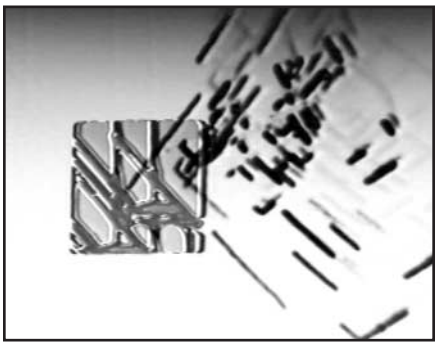
Winter (1984) 4 min.
Mar Elepaño

Elepaño comes from the Philippines, and is now a professor in the School of Cinema-Television of the University of Southern California in Los Angeles. His wonderful *Winter* parallels Vivaldi's season with abstract images drawn directly on the filmstrip.



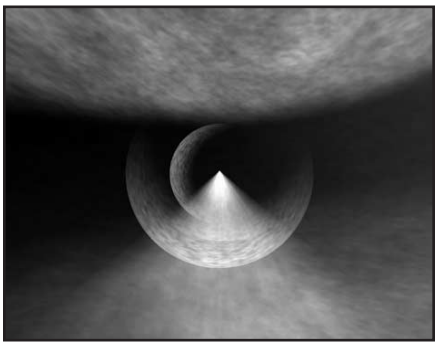
The Critic (1963) 5 min.
Ernie Pintoff/Mel Brooks

Pintoff worked at UPA studios in the 1950s, collaborating with John Whitney Sr. on two films there. In his own films such as *The Critic*, Pintoff chose a sparse UPA style of animation. The brilliant voiceover by Mel Brooks provides an "Everyman" response to abstract art. This film was a favorite of many abstract artists, including Harry Smith.



ICRON (1978) 10 min.
Bob Snyder

Snyder provides a crucial link between the cathode ray tube as a source of abstract imagery for Hirsh, McLaren and Bute, and computer graphics. In *ICRON* Snyder is manipulating video signals live for image choreography while simultaneously, in real time, improvising the musical sounds on an electronic synthesizer.

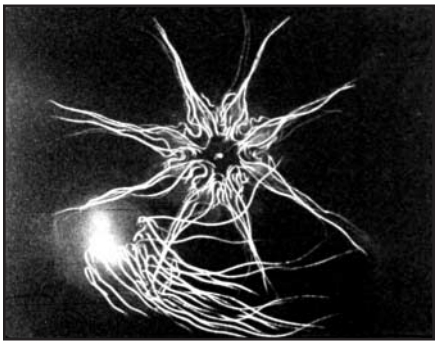


Elements in Transformation #1 and #2 (1998) 3min.
Ying Tan

Ying Tan emigrated from China and teaches computer graphics at the University of Oregon. She has made many fine computer "paintings," and her two brief films *Elements in Transformation* capture their subtle nuance and splendor in dynamic choreography.

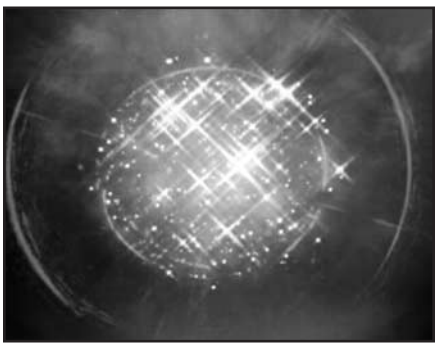
Transfigured (1998) 5.5 min.
Stephen Arthur

"By using a causal chain of actions, and by matching forms and actions between paintings, it appears as if we are inside a contiguous environment, a surreal world made from Jack Shadbolt's paintings...The viewer seems caught by a magnet or a whirlwind, which is exactly the state in which Shadbolt paints." — Stephen Arthur



Luma Nocturna (1974) 4 min.
Sky David

"Nighttime Light" uses overlapping dissolves of hand-drawn images to capture the luminescent magic of light strewn across the black city at night, from the majestic convergences of great boulevards to ephemeral amorphous supple reflections.



Bardo (2001) 13 min.
Jordan Belson

In Tibetan Buddhism, bardo is the waiting period between death and re-birth, when the soul can rest, contemplate, and regenerate its energy. The famous "Tibetan Book of the Dead," *Bardo Thodol*, is in fact a manual describing things experienced in the state of Bardo. Belson's exquisite film evokes the transitory state in a flow of subtle ethereal images, a triumph of a long life of devotion.

Hy Hirsh Preservation: History And Mystery

By Cindy Keefer

The iotaCenter's preservation and exhibition of the films of Hy Hirsh is the latest chapter in a complex story spanning a half century involving lost films, impoundment by the Paris police, and a search on two continents.

Hy Hirsh was born in Philadelphia in 1911. He lived in Los Angeles between 1916-1937, and began working with still photography in 1932, according to a curriculum vitae he prepared in 1961. He worked as a motion picture cameraman between 1930-1936, moved to San Francisco in 1937, then to Europe in 1955 where he spent the last years of his life in Amsterdam and Paris. The CV states he "Assisted various experimental filmmakers, 1946-1952. Began independent film work in 1951. Worked alternatingly at film publicity, advertising photography, fashion photography, experimental films, experimental photography in Europe."

His CV lists 10 completed films:
Divertissement Rococo (1951)
Eneri (1953)
Come Closer (stereoscopic,1953)
Gyromorphosis (1954)
Autumn Spectrum (1957)
Défense d'Afficher (1958)
Chasse des Touches (1959)
Scratch Pad (1961)
La Couleur de la Forme (1961)
Etude Anatomique du Photographe (1961)

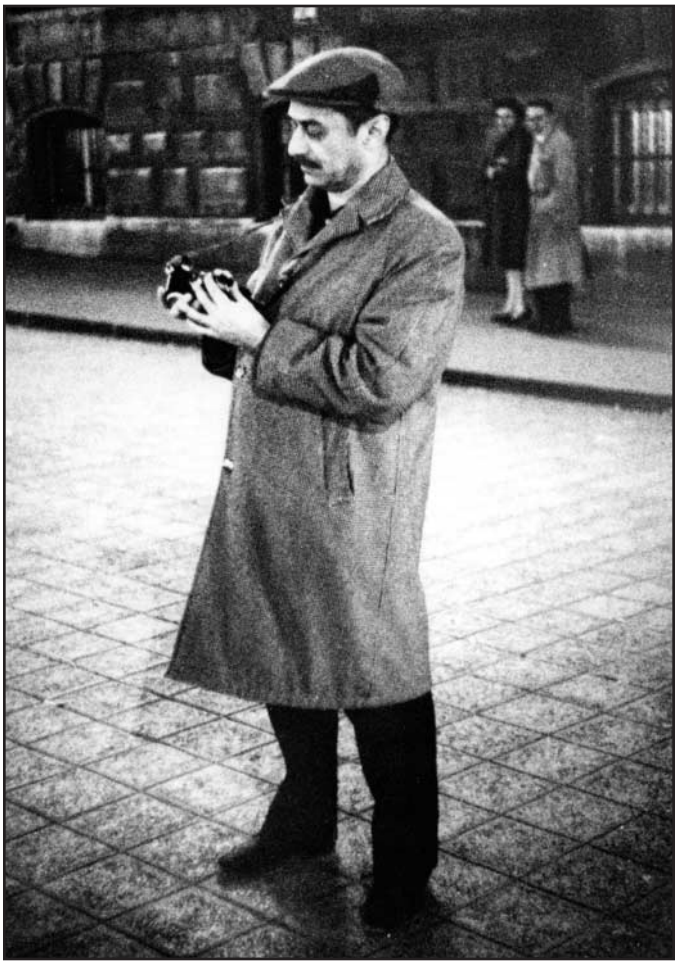
The Preservation

Hirsh's film materials came to iota as part of a donation from Angie Pike and The Creative Film Society in 1999-2000. Bob Pike of CFS had purchased in 1967 what remained of the film estate for $1000 from Hirsh's estranged daughter Diane Kleinfeld in Chatsworth, California. Mrs. Kleinfeld had received the materials from the Paris police several years after Hirsh's death in 1961 (the police impounded all his cans of film and his apartment was sealed by the US Embassy). Many stories circulated about the circumstances of his death, the most interesting that he traveled with hashish stored in film cans (he traveled often on photographic assignments), one of which was in his car at the time of his death of a heart attack while driving on the Place de la Concorde. The contents of this film can allegedly motivated the police to impound all the cans in his apartment, which contained not hashish but film. Several years later they identified Mrs. Kleinfeld as Hirsh's legal heir and shipped the materials to her — but only 2 boxes' worth remained. She apparently stored these in her garage and remained uninterested in her father's work.

In 1967 CFS began making internegatives and prints and distributing several of the films. In 1999 the Hirsh materials iota received included some of his own Kodachrome master composites, his hand-painted master of Scratch Pad, a few A&B rolls, a few mags, a few internegatives made by CFS, and some later prints. There were two small boxes containing several dozen 100 foot daylight reels of uncut camera original footage — images of fireworks, oscilloscopes, clouds, birds, nudes, tests, and various elements Hirsh combined optically for the completed films.

In Fall 1999, for The Whitney Museum of American Art's American Century exhibition, we made new materials and prints for *Come Closer* (single strand version) and the film which is known as *La Couleur de la Forme*. The Whitney's curators made extensive inquiries, but were unable to program a complete Hirsh retrospective due to unavailability of prints.

In March 2000 iotaCenter received a grant from the National Film Preservation Foundation to restore 9 Hirsh films; the Academy Film Archive offered additional assistance. Lab work was done at Triage in Los Angeles,



Hy Hirsh in Paris (c.1957)

audio at Chace Productions in Burbank. Joe Lindner supervised for the Academy Film Archive. Nine films were completed in May, 2001. Five of these films are presented in KINETICA 3 along with *La Couleur de la Forme*.

Mysteries

From programs and screening notes we know of other film work not listed on Hirsh's CV: Djinn, Double Jam, Recherche and Change of Key, possibly multiple projection performances in the 50's with material later used in finished films. Additionally we have preserved Decollage Recolles, a two reel unfinished collage film.

We have not yet preserved his *Caro Coffee Commercial*, and have several small reels of uncut camera originals marked 'Evidence' (in Hirsh's handwriting), perhaps footage for another film. We believe Hirsh made animated commercials while in Amsterdam, but have not found these yet.

CFS and Moritz spent over twenty years following leads — labs, archives, museums, colleagues, and friends to locate more of Hirsh's materials. Pike and later Moritz had over twenty years of correspondence with Barbara Shuey (an American woman living in Paris who had been romantically involved with Hirsh), who wrote to labs and archives, provided photographs and the few documents she had including the CV.

Prints or materials were never found for *Etude Anatomique du Photographe* (other than the title footage) or *Recherche* (which may have been 'research' or 'experiments'). There has always been uncertainty about *La Couleur de la Forme*. Pike was never absolutely positive that the film he distributed as *La Couleur de la Forme* was actually that film (he thought it could have been *Recherche*, Moritz thought possibly *Etude*), hence he never edited the titles onto this film. A key to this mystery lies in a French archive, where materials deposited after Hirsh's death (by a Mme. de Monfred and Mr. Maillet) under the title *La Couleur de la Forme* include "3 boites négatif image et 3 boites négatif son." We continue efforts for access to this material.

Studying the images of *Couleur*, it is not difficult to believe it could actually be *Etude Anatomique du Photographe*; there is also the possibility that *Couleur* was a multiple projection piece. But since this film was in distribution under the name *Couleur*, and until this mystery is solved, we present this film as *Couleur*.

It is possible that we have the original sources for *Etude* within the dozens of 100 foot reels, as we have the title footage. We have no reference print, notes, or idea of order (none of Hirsh's papers survive), and we have not found anyone who has ever seen this film.

Decollages Recolles is a mystery as it is unfinished, with no indication of the track Hirsh intended. We had two reels, each with a head title, but no identification whether they were to be printed together, or projected side by side (which seems more likely). Parts of reel one have optically printed layers of fireworks, oscilloscopes, birds, etc. Hirsh reprinted images similar to those in *Eneri*, *Come Closer* and *Divertissement Rococo*. Reel two is a much less polished collage with live action shots including city windows, a marching band, monkeys, circus performers, Charlie Chaplin footage and Paris neon at night.

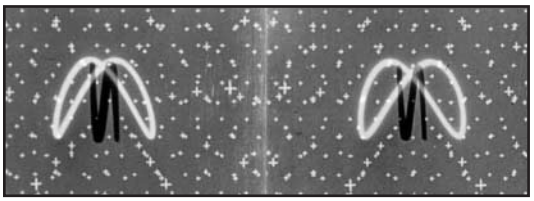
Our research continues to solve the mysteries surrounding the films of Hy Hirsh. We'd appreciate hearing from anyone who may have Hirsh film material, photographs, letters, recordings, program notes or ephemera, at ckeefer@iotacenter.org

For more about Hy Hirsh, please visit:
www.iotacenter.org/Hirsh

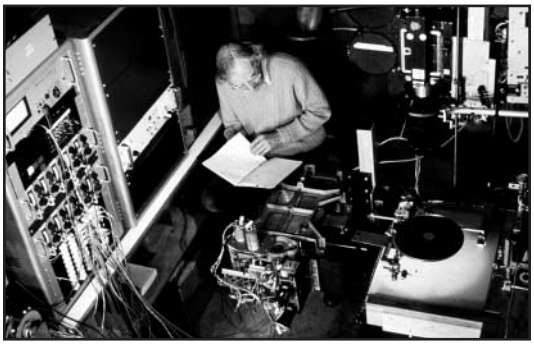
The Analog Roots of Computer Art

By Larry Cuba

Mary Ellen Bute

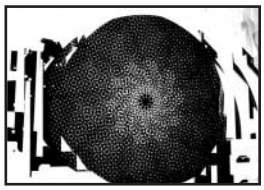


Around is Around Norman McLaren



John Whitney, Sr. and "Analog Cam Machine"

Original Art in Machine



Multiple Exposure and Motion Control

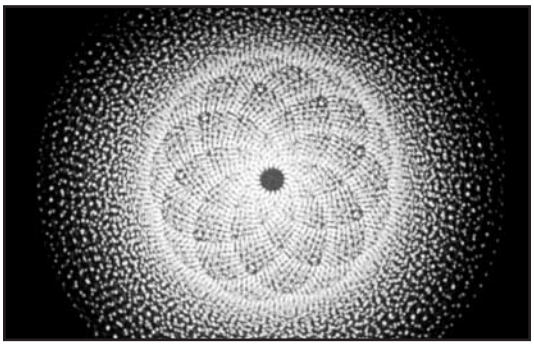
With the complete ubiquity of digital computers today, it's easy to forget that there are other, older technologies for synthesizing abstract images electronically.

Some of the earliest abstract films were made in Germany in the '20s by a collaboration of Hans Richter and Viking Eggeling. When the DeStijl artist Van Doesberg visited the Richter-Eggeling studio in 1921 and saw the tedious animation process employed, he wrote, "…these carefully worked out drawings…proved to be insufficiently exact, in spite of their precision. The enormous enlargement by the lens…betrays each weakness of the human hand. And as it is not the hand anymore but the spirit which makes art, and, as the new spirit demands the greatest possible exactitude of expression, only the machine in her extreme perfection can realize the higher demands of the creating spirit. Thus, the need for these very rigorously precise drawings demand that…these drawings be mechanically produced...One can understand that abstract film-making is an area where mechanical means of drawing can render important services…"

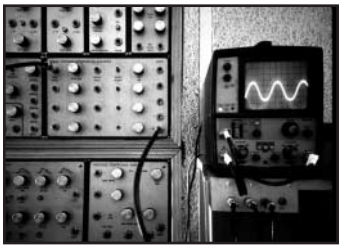
From the very beginning of abstract animation there was the realization that "the higher demands of the creating spirit" would lead to a new technology of image making — not merely as a method for saving time or labor, but as a path to new aesthetic possibilities. Thirty years later that quest led to electronics and, in particular, the electronic analog computer. When controlling the electron beam of an oscilloscope (CRT), electronic signals become visible patterns. Manipulate the signal with the computer and you animate the corresponding forms on the screen.

An analog computer can consist of any number of individual modules, but the oscilloscope films by Hy Hirsh and Mary Ellen Bute presented in KINETICA 3 were probably produced with just a few oscillator units. Norman McLaren made his oscilloscope film, *Around is Around*, in "3-D," a term which in the '50s referred to stereoscopy rather than solid modeling.

During WWII, a device for aiming anti-aircraft guns was developed that consisted of an analog computer and a mechanism of cams, gears, and servo motors. After the war John Whitney, Sr. was able to buy this sophisticated military gear at surplus



Lapis James Whitney



Emu with Oscilloscope

L to R: Sandin IP, Bob Snyder, Emu

prices and adapt it for the purpose of art. With his "Analog Cam Machine" (as he called it) directing the movement of artwork beneath an animation camera, Whitney invented a whole class of special effects techniques which became the standard of the industry — what is now called "motion control." As useful as motion control became to the film industry, its original purpose was art. Among the many films produced with Whitney's invention are his own *Catalog* (1961) and his brother James' *Lapis* (1966).

Electronic music synthesizers of the time (such as the Moog, Buchla and Emu) were a also a type of analog computer. How the electronic signals were routed through the various processing modules determined what kind of sound was produced. When this same type of manipulation was applied to a standard video signal, video image synthesis was born. There was quite a variety of video synthesizers developed during the '60s and '70s: Paik-Abe, Rutt-Etra, Sandin IP, Beck Direct, among others.

A high watermark in the connection between musical and visual composition was attained by Bob Snyder in his videos *Winter Notebook* (1977) and *ICRON* (1978). He achieved a remarkable correspondence between image and sound by combining three pieces of equipment into a single system: an Emu music synthesizer, a Sandin IP video synthesizer, and a Hewlett-Packard display (basically an oscilloscope but without a built-in sweep signal).

First a vocabulary of sound/image combinations were built with the signals from the music synthesizer generating patterns on the HP display and recorded on videotape. Then these individual "voices" were composited into a complex chorus of color and sound with the Emu and the video synthesizer working in tandem. The result is a rich tapestry of auditory/visual correspondences.

It's instructive to look at the relationship between the technology of an era and how it's used in the art making process. Even though older technologies are soon superceded by newer, more advanced technologies, the art itself never becomes "obsolete."

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About The iotaCenter

The iotaCenter is a non-profit organization dedicated to preserving, promoting and exhibiting the art of abstraction in the moving image. There are four aspects to our program:

Research and Publication
The iotaCenter's Study Center is one of the world's largest collections of materials devoted to abstraction in film, video, and performance art. Including thirty years of research materials generously donated by Dr. William Moritz, the library receives gifts from artists, collectors and scholars. The goal of the History Project is to compile this information into an online database for internet access.

Preservation and Restoration
The artifacts of film and video are fleeting and there are countless titles that are in need of preservation before they are lost forever. The iotaCenter has received grants from the National Film Preservation Foundation to preserve works by Hy Hirsh, Jordan Belson, and Jules Engel. The iotaCenter has also preserved films by John and James Whitney, Harry Smith, Patricia Marx and Mary Ellen Bute.

Exhibition and Distribution
Through its touring screening series, KINETICA, and a series of videotape releases called The KINETICA Video Library, The iotaCenter is bringing these rarely seen works to an ever-growing international audience.

Community
In every aspect of its programs, The iotaCenter strives to build a network of people and resources relevant to this unique art form. Through its website, online discussion group, and email newsletter, The iotaCenter fosters a vibrant international community of artists, scholars and educators. Everyone interested in this art form is invited to join in.

www.iotaCenter.org
email: info@iotacenter.org
The iotaCenter is a 501(c)3 non-profit corporation.

About KINETICA

KINETICA is a touring festival of abstract art in film and video. KINETICA 2 which began in July, 2000, is a tribute to Oskar Fischinger (1900-1967) on the occasion of his 100th birthday. For more information and current schedule, see: www.iotacenter.org/Fischinger

KINETICA 2 Tour Schedule:

July 6-9, 2000	The Museum of Modern Art New York, NY
July 28-29, 2000	Los Angeles County Museum of Art Los Angeles, CA
September 23-26, 2000	Pacific Film Archive Berkeley, CA
October 13-15, 2000	Harvard Film Archive Cambridge, MA
October 29, 2000	The National Gallery of Art Washington, DC
December 6-20, 2000	The Cleveland Museum of Art Cleveland, OH
March 14 & 21, 2001	The Experience Music Project Seattle, WA
April 14, 2001	U. of Wisconsin Cinematheque Madison, WI
April 21, 2001	U. of Chicago, Chicago, IL
April 30, 2001	Columbus College of Art and Design Columbus, OH
June 14-15, 2001	Northwest Film Forum, Seattle, WA
Fall 2001	Anthology Film Archives, New York, NY
Fall 2001	Royal Film Archive, Brussels, Belgium
November 2001	INDAC Festival Cologne, Bonn, Düsseldorf & Duisburg, Germany
December 2001	Svenska Filminstitutet's Cinemateket Stockholm, Sweden
Dec. 20, 23, 27, 2001	Barcelona Centre of Contemporary Culture, Barcelona, Spain
January 2002	Centre Pompidou, Paris, France

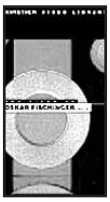
The iotaCenter Store

A few selections from www.iotaCenter.org/store

The Films of Oskar Fischinger, Vol. I

Contents: *Muratti Gets in the Act, Spiritual Constructions, Study No. 7, Study No. 8, Circles, Allegretto, and Motion Painting No. 1.*
KVL001, 30 minutes, $40.
Institutions: $100

The Films of Oskar Fischinger, Vol. II



Contents: *Muratti Privat, Walking from Munich to Berlin, Wax Experiments, Studies No. 5, 9, & 12, Composition in Blue, American March, Organic Fragment, Mutoscope Reels, Muntz TV.*
KVL002, 40 minutes, $40.
Institutions: $100

CBS Camera 3

The award-winning arts documentary series now available on VHS. Each episode: 28 minutes $75.00

Oskar Fischinger: Featuring William Moritz, Elfriede Fischinger and John Canemaker. (1977) KVL006

John Whitney, Sr: The artist is interviewed at his home and studio in California. (1975) KVL007

Norman McLaren: Norman McLaren talks with film historian William Sloan. (1970) KVL011

Len Lye: Lye discusses his work and ideas, demonstrates some of his moving sculptures, and shows clips from his films. (1957) KVL012

Hans Richter: Scripted documentary and interview with artist-sculptor-filmmaker-surrealist Hans Richter. (1973) KVL010

Stan Vanderbeek: The pioneering experimental filmmaker is seen here at work at the sophisticated "new" 1972 computer at MIT. (1972) KVL016

All videos are VHS, NTSC format.

For more information, please call: 310-842-8704
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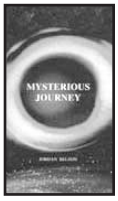
Jordan Belson: *Mysterious Journey*



This visual meditation on the cosmos is the longest film of Belson's career and perhaps his definitive artistic statement.
KVL003, 30 minutes, $20.

Len Lye: *Rhythms*

Features newly restored prints and a 28-page booklet. Contains twelve titles from *A Colour Box* (1935) to *Particles in Space* (1980) including the rarely seen *Rhythm* (1957).
KVL017, 47 minutes, $40.

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Check the online store for more detailed information about these tapes, the upcoming releases and other tapes featuring the work of Stan Brakhage, Glenn McKay, Bill Alves, and Robert Darroll.

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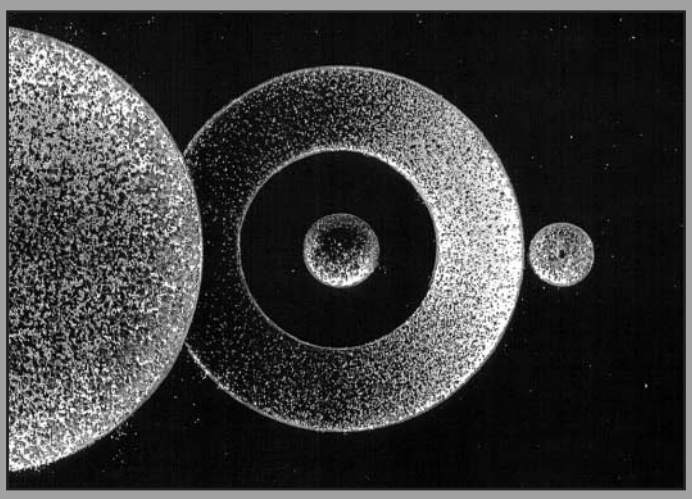

Mandala

Jordan Belson

Jordan Belson studied painting before seeing Oskar Fischinger and the Whitney brothers' films at the 1946 Art in Cinema screenings at the San Francisco Museum of Art, whereupon he increasingly devoted himself to the moving abstract image.

Between 1957 and 1959, Belson collaborated with composer Henry Jacobs on the historic Vortex Concerts, which combined the latest electronic music with moving visual abstractions projected on the dome of Morrison Planetarium in San Francisco. Together with the contemplative Lumia of Thomas Wilfred's slowly evolving polymorphous light projections, the Vortex experience inspired Belson to abandon traditional animation in favor of creating visual phenomena by live manipulation of pure light on an optical bench. This has been the technological basis for his more than 20 films from *Allures* (1961) to *Bardo* (2001).

The second major well-spring of Belson's mature films arose from his increasing involvement with mystical and contemplative philosophies. During the 1950s, he had been a part of the Yoga and Buddhism of San Francisco's North Beach Beat scene. The mature films frequently express aspects of Indian mysticism and yoga reflected in the titles of his masterpieces *Samadhi* (1967) and *Chakra* (1972), which render the actual visual and auditory phenomena experienced in heightened states of meditative concentration. They also explore the relationship between scientific theories and human, spiritual perception [*Phenomena* (1965), *Light* (1973).] Many of the films share certain images which Belson regards as "hieroglyphic-ideographic" visual units that express complex ideation not easily stated in verbal terms.

— William Moritz