

# History of Computer Art

URL: [http://iasl.uni-muenchen.de/links/GCA\\_Indexe.html](http://iasl.uni-muenchen.de/links/GCA_Indexe.html)

## **Part IV: Video Tools**

Seminar, 28<sup>nd</sup> April 2014/4<sup>th</sup> September 2015

Danube University Krems

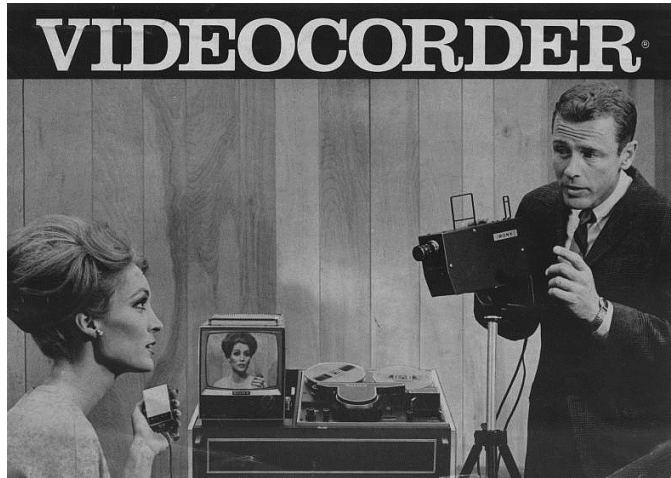
Department for Arts and Image Science

MediaArHistories: Masters of Art

Thomas Dreher

URL: <http://dreher.netzliteratur.net>

# Early Video Systems



Left: Sony VCK 2000, since 1965. A woman with microphone and a man with the video camera mounted on a tripod. Behind it: Recorder with magnetic tape and monitor. Photo: Sony.

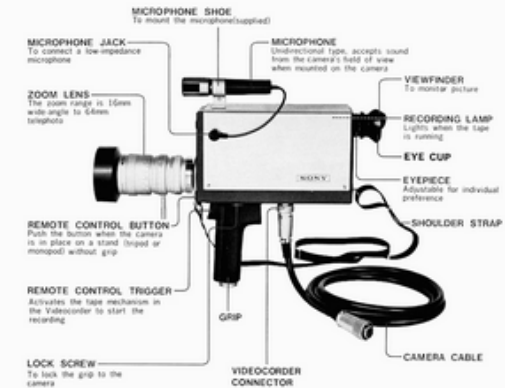
Image Source: [http://www.smecc.org/sony\\_cv\\_series\\_video.htm](http://www.smecc.org/sony_cv_series_video.htm)



Middle: Sony Porta Pak CV 2400, since 1968. Left: Woman with video camera and portable video recorder. Right: Video camera. Photos: Sony.

Middle: Image source: URL: <http://iasl.uni-muenchen.de/links/GCA-IV.1e.html>  
Image source: URL: <http://www.smecc.org/video/wpe3C.gif>

## LOCATION OF PARTS AND CONTROLS



3

# Video and TV



VanDerBeek, Stan:  
Violence Sonata, 1970,  
TV-transmission, WGBH,  
Boston, channel 2 (above)  
and channel 44. URL: <http://main.wgbh.org/wgbh/NTW/ES/Video/violence201.html>



First Transmission of ACTV,  
Video, 1972. First trans-  
mission of the cable station  
Austin Community Tele-  
vision (ACTV), 1972.

George Stoney tells about  
his experiences with cable  
access in Mexico. He was  
filmed on the hilltop with  
the cable company's  
antenna which was the  
head-end for the distri-  
bution of broadcast signals  
through the cable network.  
URL: <http://www.vdb.org/smackn.acgi?apedetail?FIRSTTRANS>

Contact George Stoney, NYU—School of the Arts, 111 2nd Ave., NYC, for extensive information on their use of 1/2" portable video and plans for Alternate Media Center.

As you probably know, to ban half-inch portable equipment from CATV local origination uses would be equivalent to denying community groups access to cable as it would mean that they would be limited to either a heavy hardware investment or bound to just a studio situation (controlled by the CATV owner).

As you probably also know, half-inch portables are relatively cheap (\$1,500), fabulously easy to use, and can operate anywhere there's normal lighting conditions.

What we'd like to know is what is the F.C.C.'s position vis-a-vis portable half inch video used with CATV. Has it been discussed? Do you anticipate a ruling either way?

We'd like your permission to include your reply in the next issue of *Radical Software*. If this is okay with you, may we hear from you by the second week in June which is the deadline for our next issue.

Thank you. Thank you. RAINDANCE  
ELFARE ISLAND

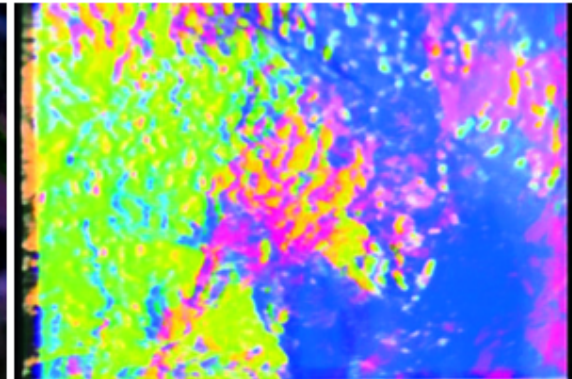
right: Radical Software. Vol.1/Nr.4, Summer 1971, p.23: Call for the use of cable accesses for the broadcast of videos produced with "half-inch portable equipment".

## WGBH TV, Boston



Kaprow, Allan: Hello, TV broadcast "The Medium is the Medium", WGBH, Boston, video, 1969.

Image source: URL: <http://www.eai.org/title.htm?id=14357>



Paik, Nam June.

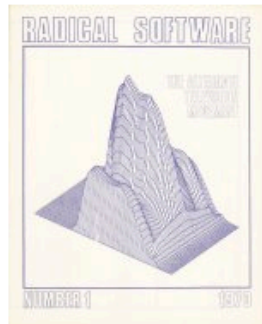
Left: Electronic Opera #1, WGBH-TV, Boston, video, 1969.

Screenshot from URL: <http://openvault.wgbh.org/catalog/ntw-mla000209-nam-june-paik-s-electronic-opera-1>

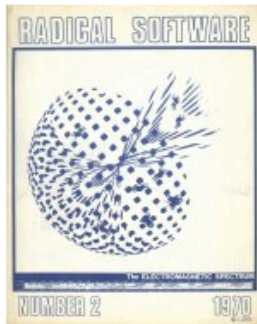
Right: Video Commune – The Beatles from Beginning to End, WGBH-TV, Boston, video, 1970.

Screenshot from URL: <http://www.medienkunstnetz.de/works/video-commune/>

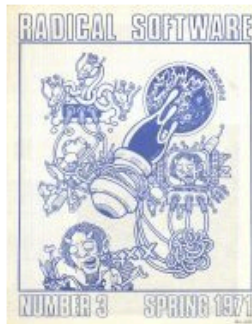
# Radical Software, 1970-1974



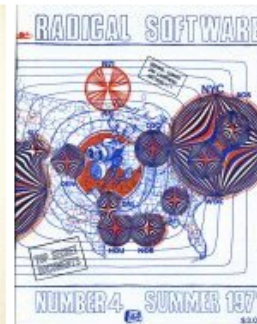
Vol. I, no. 1



Vol. I, no. 2



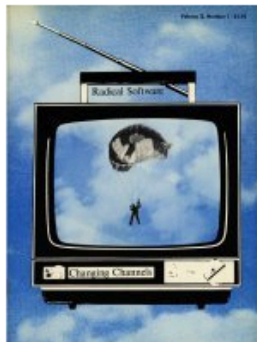
Vol. I, no. 3



Vol. I, no. 4



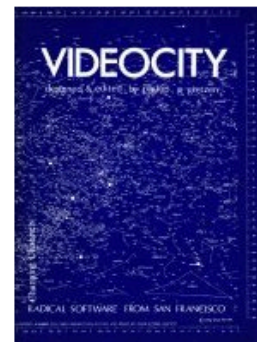
Vol. I, no. 5



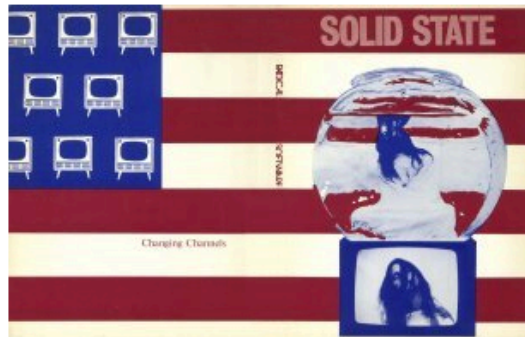
Vol. II, no. 1



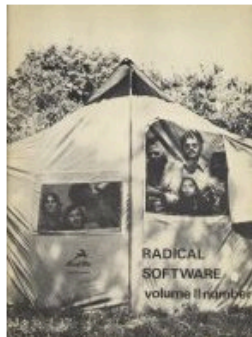
Vol. II, no. 2



Vol. II, no. 3



Vol. II, no. 4



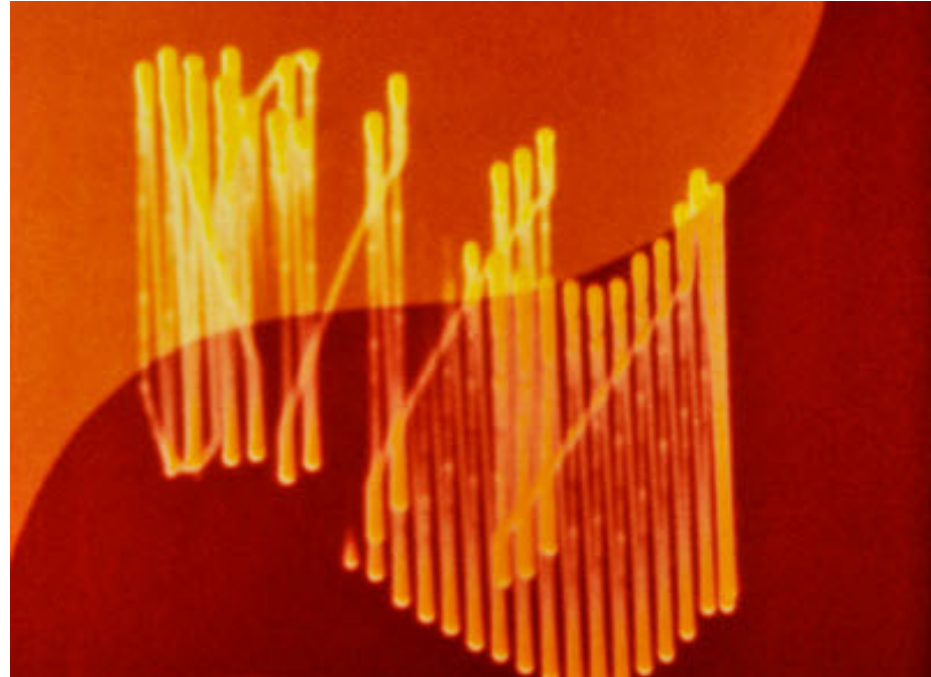
Vol. II, no. 5



Vol. II, no. 6

Covers of the Journal Radical Software, 1970-74. Image Source: URL: <http://www.radicalsoftware.org/e/browse.html> 5

# Oscillographs I



Bute, Mary Ellen:

Left: Bute at the fine-tuning of her oscillograph. Photo: Ted Nemeth, c. 1954. Courtesy Center for Visual Music (Zinman: Circuit 2012, p.140).

Right: Abstronic, film, 1952. Image Source: <http://www.centerforvisualmusic.org/abstronic2%20em%20arts.jpg>

# Oscillographs II



Franke, Herbert W.: UFA-Wochenschau 170/1959, film, 10/27/1959 (weekly show for cinemas). Cameraman: Vlasdeck.

Left: screen of the oscillograph.

Right: The units on the left of the oscillograph were used by Franke to readjust in real time the output, as it was produced by Franz Raimann's analog calculation system.

Image Source: <https://www.filmothek.bundesarchiv.de/video/584360>

# Luminoscope



Schoeffer, Nicolas:

Left: Luminoscope I, 1959. Image Source: <https://s-media-cache-ak0.pinimg.com/originals/cd/ff/dd/cdffddc08e492b15d474a1d1fdbe8083.jpg>

Rigth: Variations luminodynamiques, film, 1961. Documentation of the programme sent by the television channel ORTF, 25th October 1961. Still with the gospel singer Gordon Heath. Image Source: <http://www.olats.org/schoffer/archives/Variations%20Luminodynamiques.html>



# ANIMATE



Harrison III, Lee: ANIMAC, 1962. A dancer controls the line patterns of a figure by activating sensors mounted on her body. Denver 1962 (photomontage). Image Source: URL: [http://www.vasulka.org/Kitchen/PDF\\_Eigenwelt/pdf/092-095.pdf](http://www.vasulka.org/Kitchen/PDF_Eigenwelt/pdf/092-095.pdf)

# Ture Sjölander

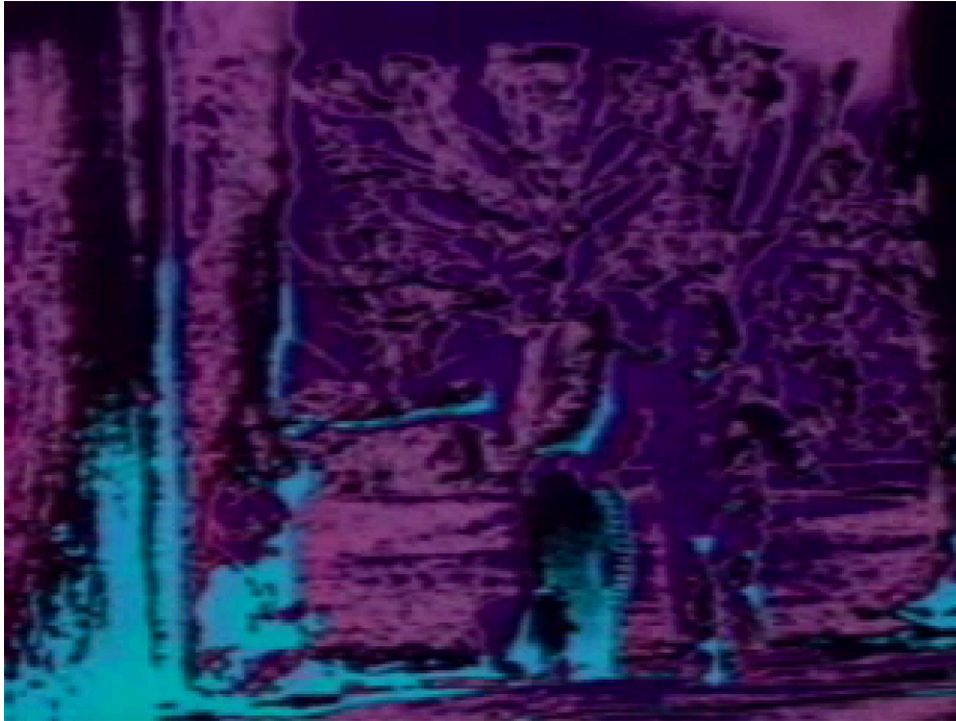


Sjölander, Ture/Wikström, Bror/Modin, Bengt: Time, 1966. Film for Sveriges Radio (Stockholm). Image Source: <http://www.centerforvisualmusic.org/abstronic2%20em%20arts.jpg>

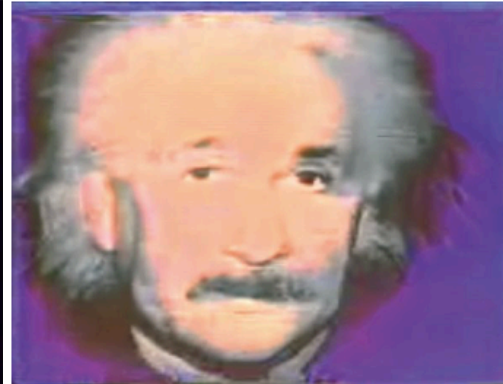


Sjölander, Ture/Weck, Lars: Monument, 1967. Film for Sveriges Radio, Stockholm, January 1968. Image Source: <http://www.centerforvisualmusic.org/abstronic2%20em%20arts.jpg>

# Truqueur Universel/Video Colour Synthesizer



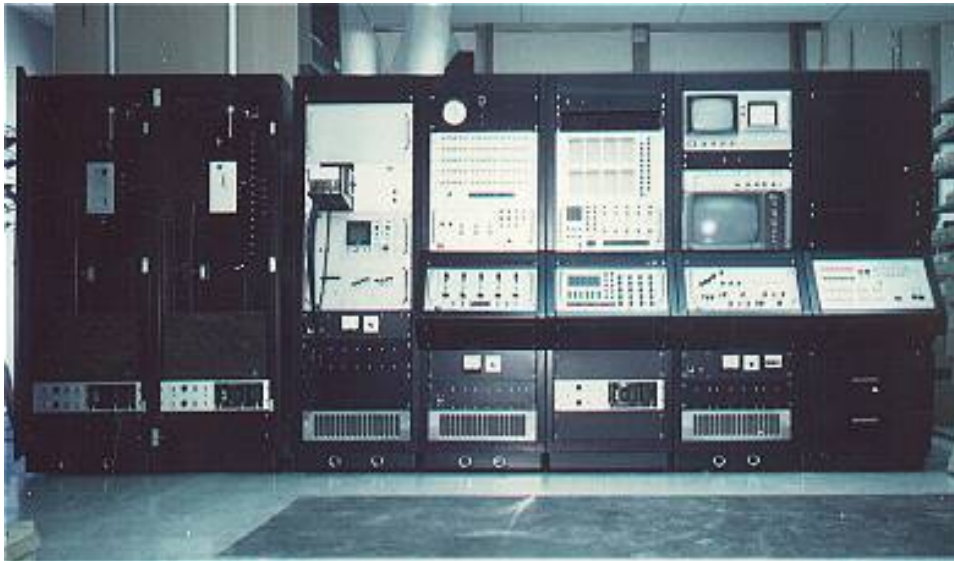
Cahen, Robert: L'invitation au voyage, video, 1973. Image Source: <http://24-25.fr/work.php?work-id=gama:heure-exquise:main:Work:2169>



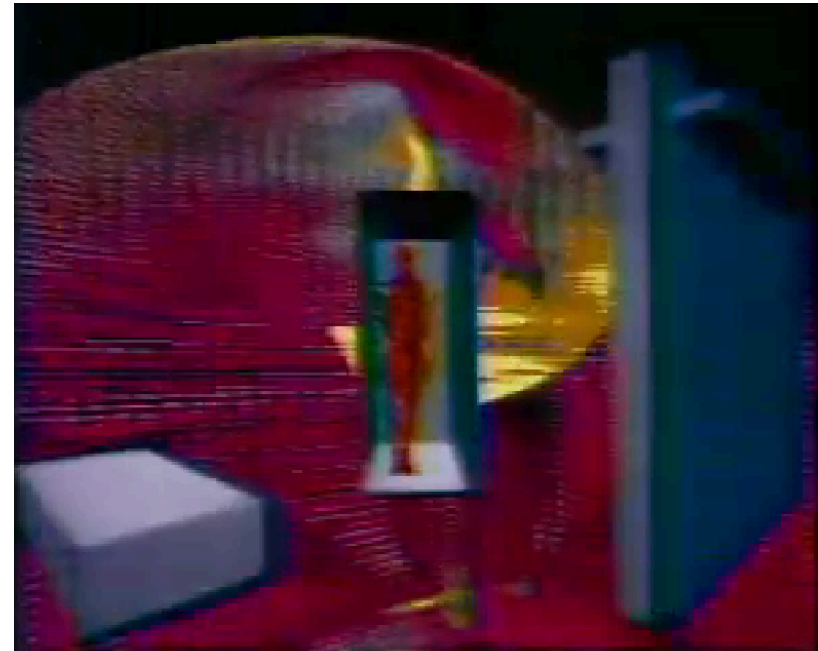
Siegel, Eric: Einstein, video, 1969. (Kane: Algorithms 2014, p.73).



# SCANIMATE



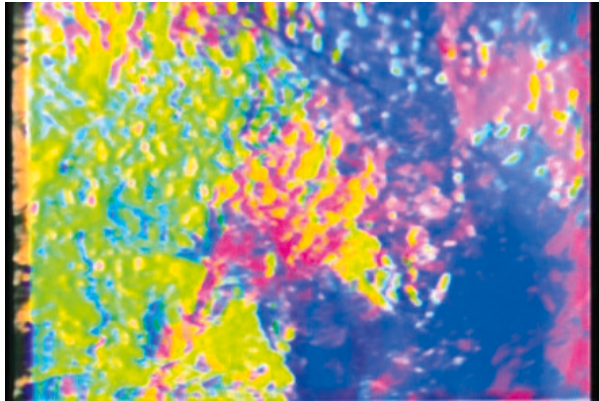
Harrison III, Lee: SCANIMATE, 1969. Brand new SCANIMATE at Dolphin Productions, New York City 1973. Image Source: URL: <http://scanimate.zfx.com/photo1.html>



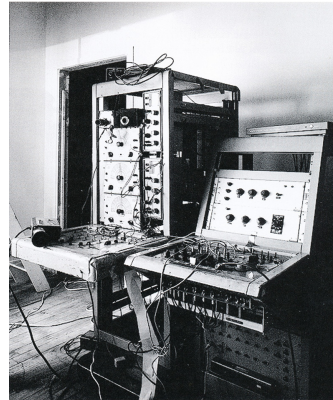
Emshwiller, Ed: Scape-mates, video built with Scanimate in the TV Lab of the New York Station WNET/Thirteen, 1972.

Screenshot from: URL: <https://www.youtube.com/watch?v=4PXs5szhnOw>

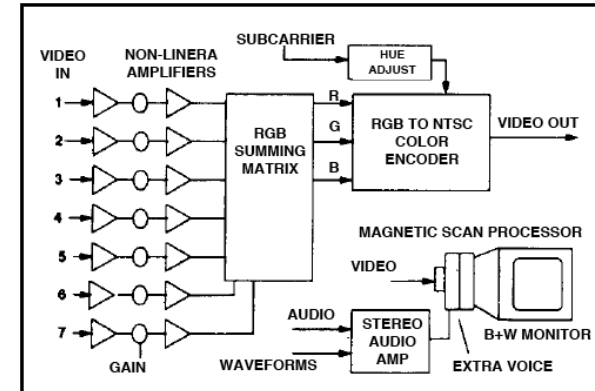
# Video-Processors and Synthesizers, since 1970



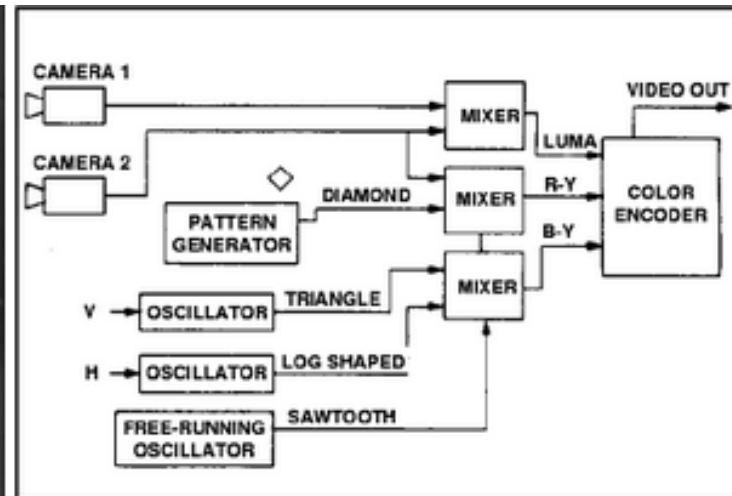
Paik, Nam June: Video Commune – The Beatles from Beginning to End, WGBH-TV, Boston, Video, 1970. Screenshot from URL: <http://www.medienkunstnetz.de/works/video-commune/>



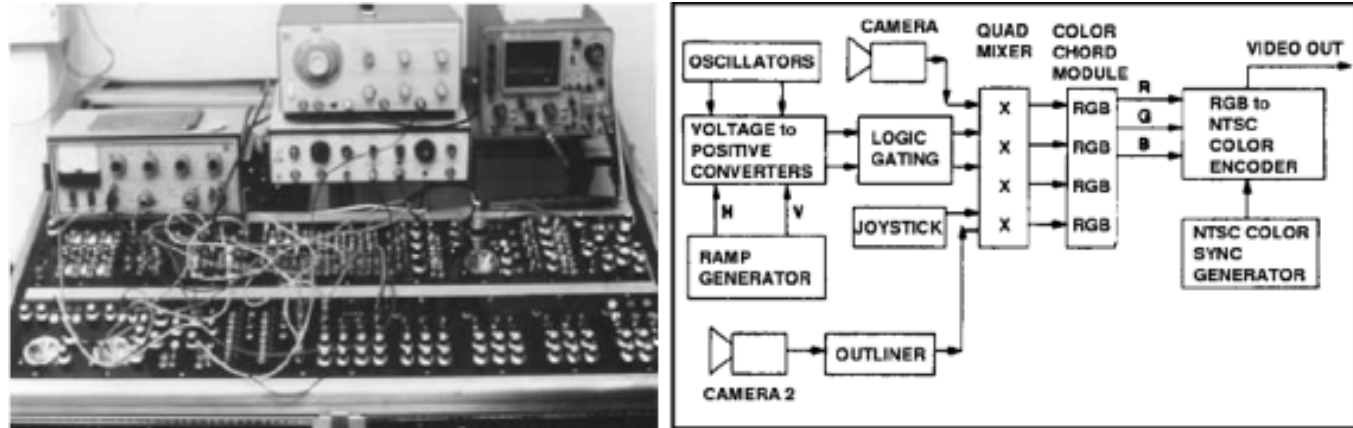
Abe, Shuya/Paik, Nam June: Paik/Abe Video Synthesizer. Left: model of 1972, WNET/Thirteen, New York (Courtesy Nam June Paik Studios, Inc. In: Joselit: Feedback 2007, p.47). Right: diagram of functions by Jeffrey Schier (Dunn/Vasulka/Weibel: Eigenwelt 1992, p.129).



Siegel, Eric: EVS Video Synthesizer, 1970. Left: Eric Siegel in the office of Electronic Arts Intermix, New York, ca. 1971. Screenshot from URL: <http://www.eai.org/kinetic/ch2/siegel/filmvideo.html>. Right: Function diagram by Jeffrey Schier (Dunn/Vasulka/Weibel: Eigenwelt 1992, p.121).



# Stephen Beck: Direct Video Synthesizer, 1970

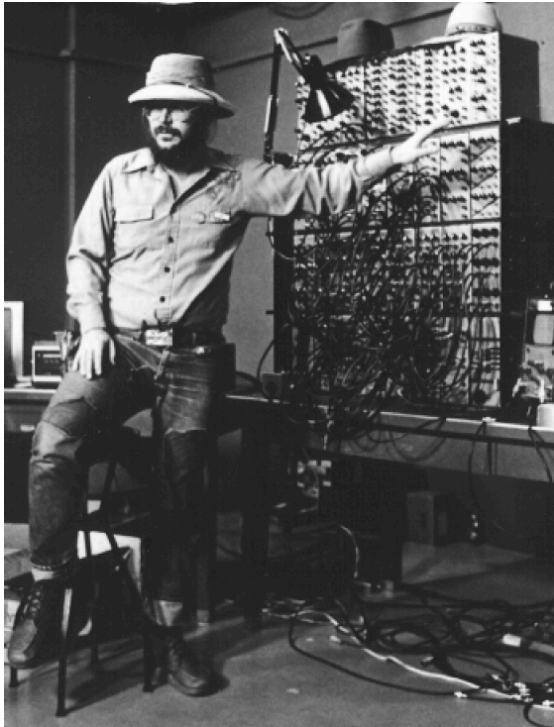


Beck, Stephen: Direct Video Synthesizer, 1970. Left: supervision.  
Right: diagram of functions by Jeffrey Schier. (Dunn/Vasulka/Weibel: Eigenwelt 1992, S.123s.)



Beck, Stephen/Jepson, Warner: Illuminated Music 2 & 3, video documentation by a programme of the PBS (Public Broadcasting Service), 1973. Left: Beck at his Direct Video Synthesizer. Right: Beck's visualization of Jepson's music. Screenshots from URL: [http://www.ubu.com/film/beck\\_illuminated.html](http://www.ubu.com/film/beck_illuminated.html) 4

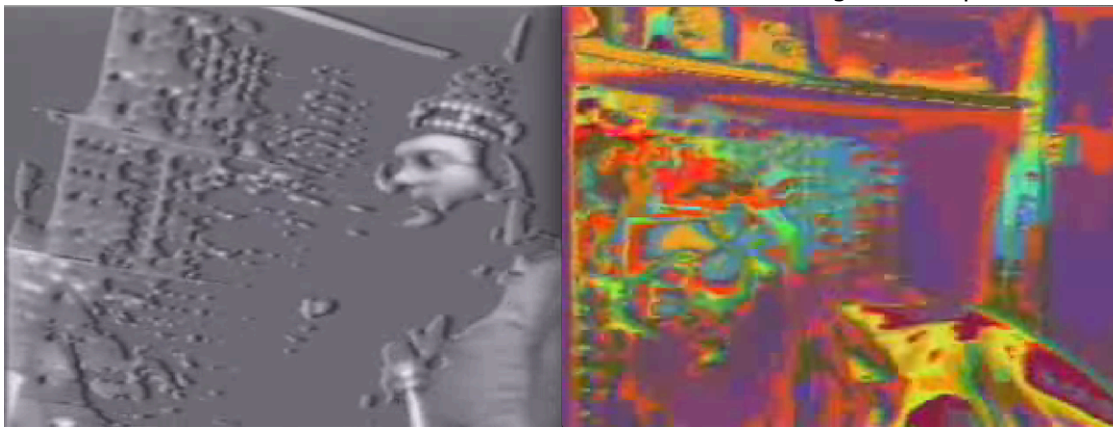
# Dan Sandin: Analog Image Processor, 1971-73



Left: Dan Sandin with the Analog Image Processor, Chicago 1972 (Dunn/Vasulka/Weibel: *Eigenwelt* 1992, p.133).



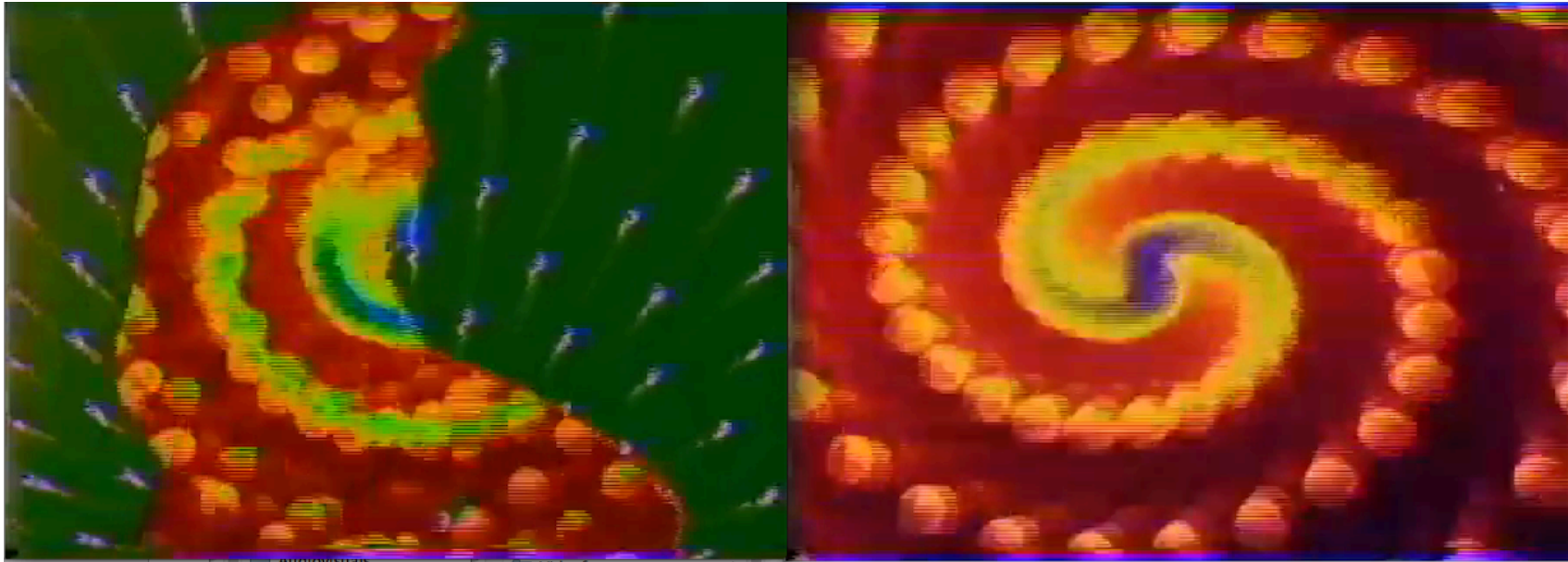
Right: Triangle in Front of Square in Front of Circle in Front of Triangle, video, 1973. Screenshot from URL: <http://www.vdb.org/titles/triangle-front-square-front-circle-front-triangle>



Left, bottom: 5 Minute Romp Through the IP [Analog Image Processor], video, 1973.

Screenshots from URL: <https://www.youtube.com/watch?v=8qh6jRzjmcY>

## Ryal, 1976

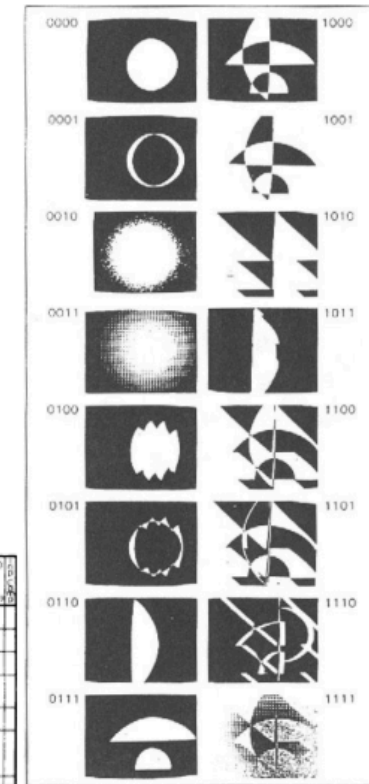
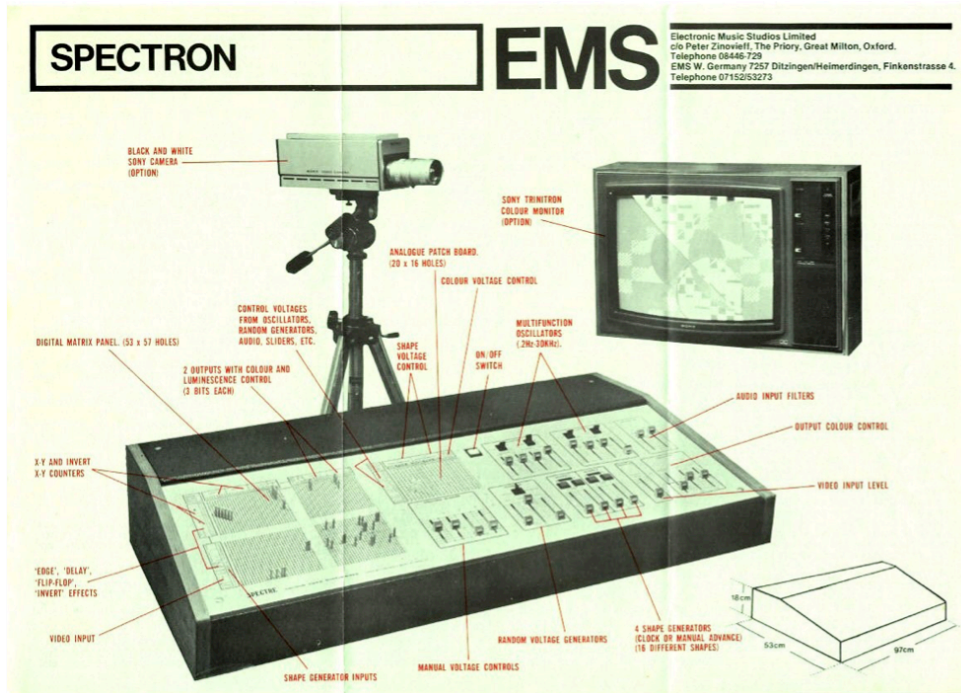


DeFanti, Tom/Morton, Phil/Sandin, Dan/Snyders, Bob: Ryal, video of a live performance at the University of Illinois, Chicago 1976.

Screenshots from URL: <https://www.youtube.com/watch?v=fnYwFstm4bk>



# EMC Spectron I



Electronic Music Studios, Ltd (EMS): Spectron, 1974. Video synthesizer (Siedler: EMS undated, p.7).

Left: All parts.

Middle: Digital Signal Matrix and Analog Control Matrix (Monkhouse: Art 1974, p.26).

Right: 16 basic forms (Siedler: Spectre undated). Image Source: <http://www.centerforvisualmusic.org/abstronic2%20em%20arts.jpg>

# EMC Spectron II

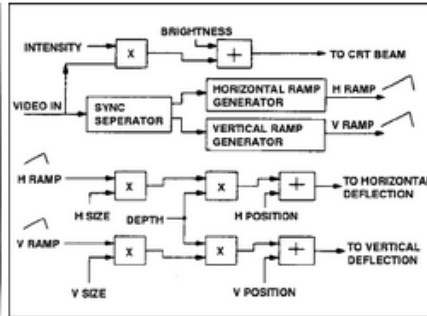
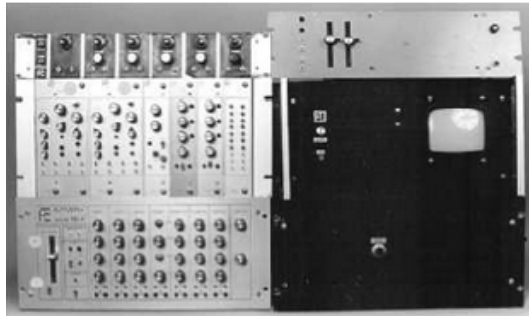


Guyonnet, Jacques: Lucifer Photophore, video, 1975.  
Image Source: <https://www.youtube.com/embed/T1cTqFGUf10>



Calame, Geneviève/Guyonnet, Jacques: Labyrinthes fluides, video, 1976. Image Source: <https://www.youtube.com/embed/TRgXqOhBQEU>

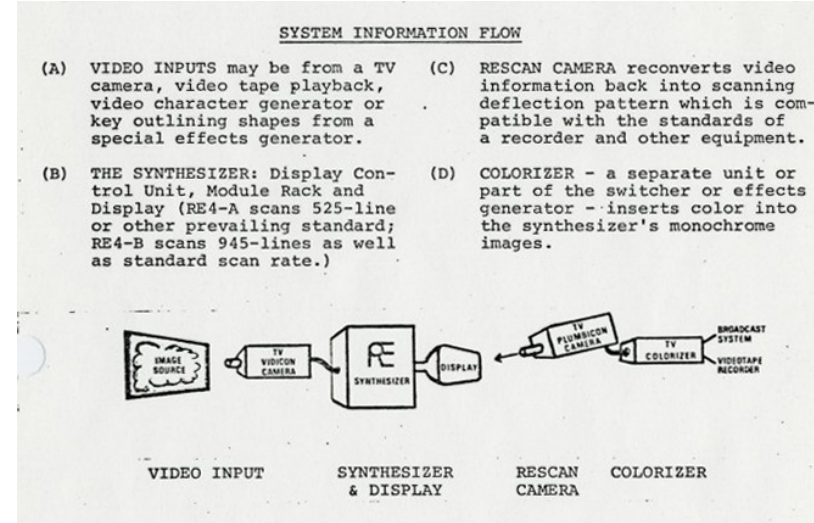
# Bill Etra & Steve Rutt: The Rutt/Etra Scan Processor, 1973



Left, top: Rutt/Etra Model RE-4 Scan Processor.

Middle, top: function diagram by Jeffrey Schier.

(Dunn/Vasulka/Weibel: Eigenwelt 1992, p.137,139)

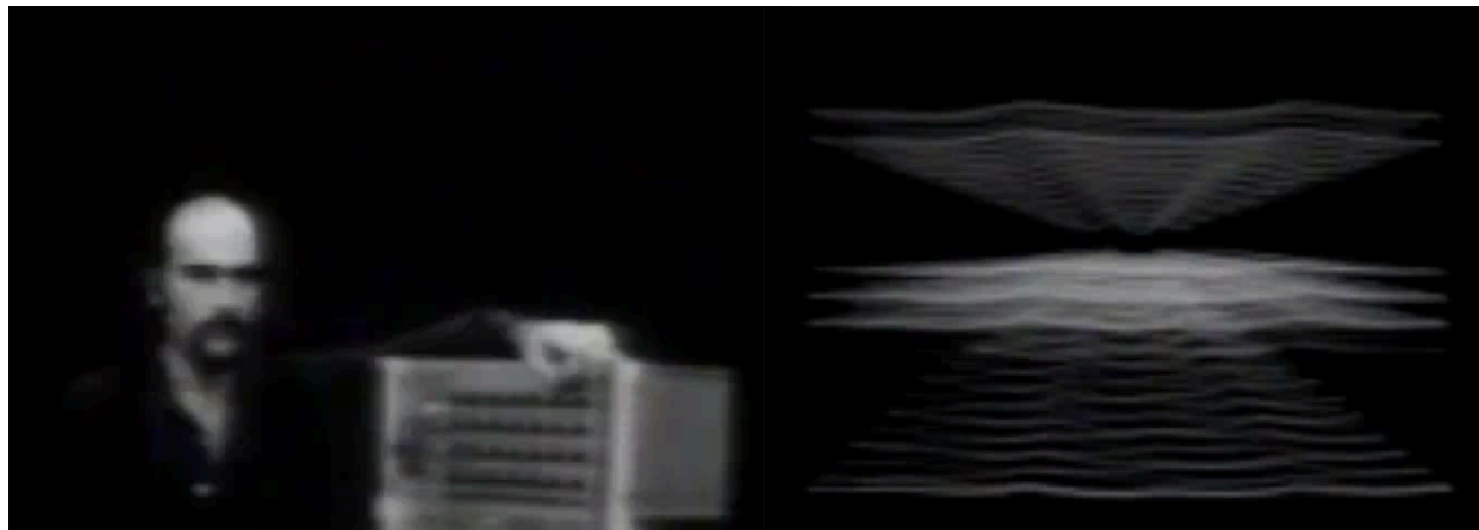


Right, top: User manual for the Rutt/Etra Scan Processor with "system information flow".

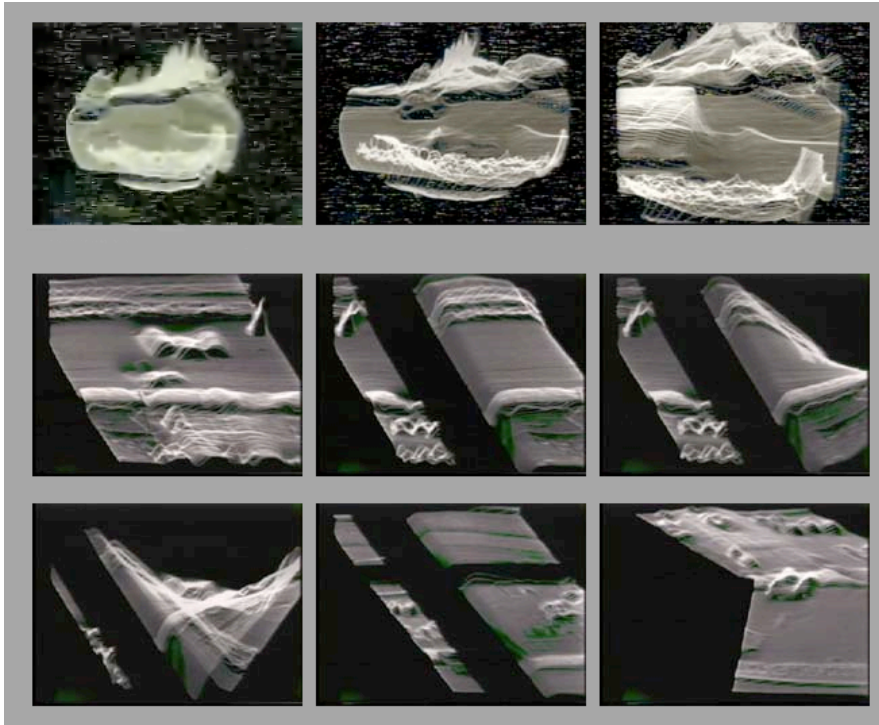
(Rutt/Etra: RE Video Synthesizer Systems Models RE 4A and RE 4B 1974, p.3).

Right, bottom: Rutt/Etra Scan Processor, 1973. Demo by Bill Etra, video.

Screenshots from URL: <https://www.youtube.com/watch?v=EZQiHuTbnes>

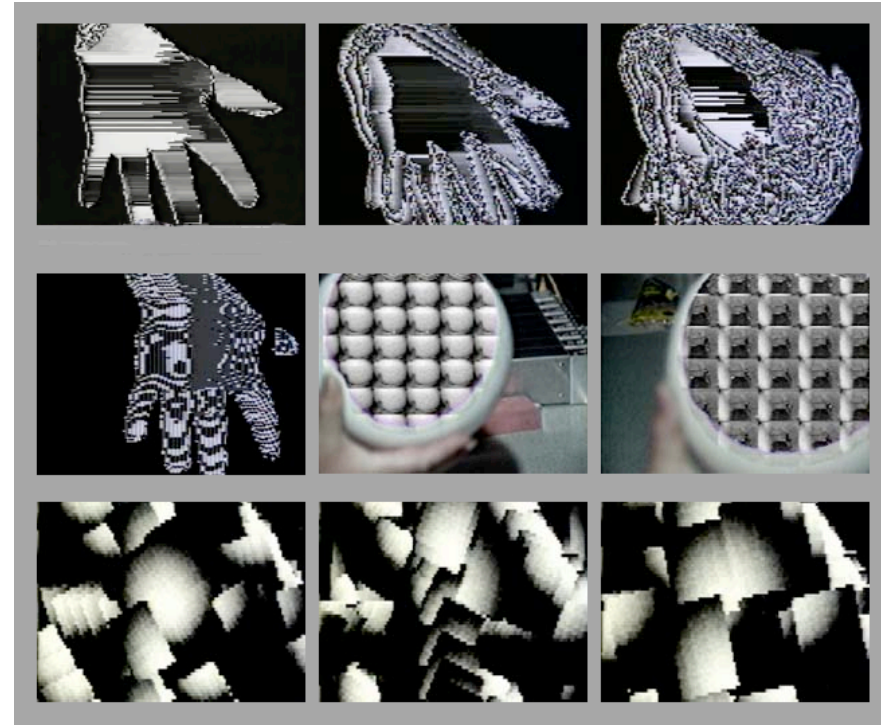


# Woody Vasulka (I)



Left: C-Trend, video built with the Rutt/Etra Scan Processor, 1974.

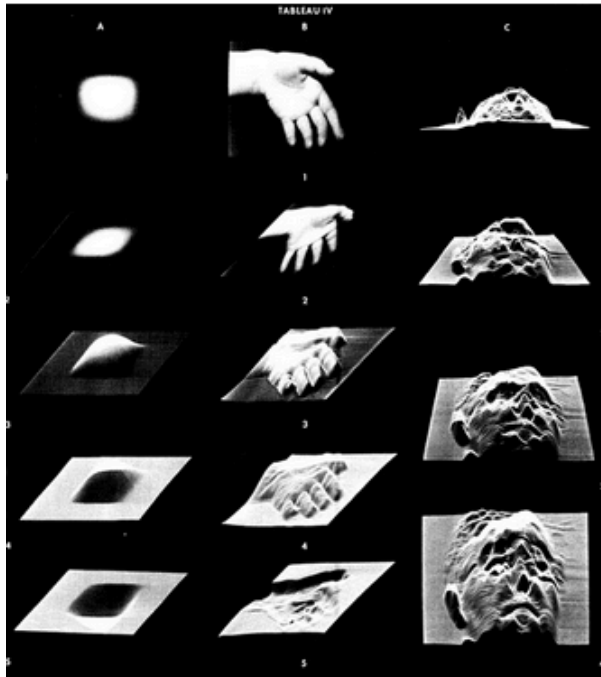
Screenshot from URL: [http://vasulka.org/Videomasters/pages\\_stills/index\\_19.html](http://vasulka.org/Videomasters/pages_stills/index_19.html)



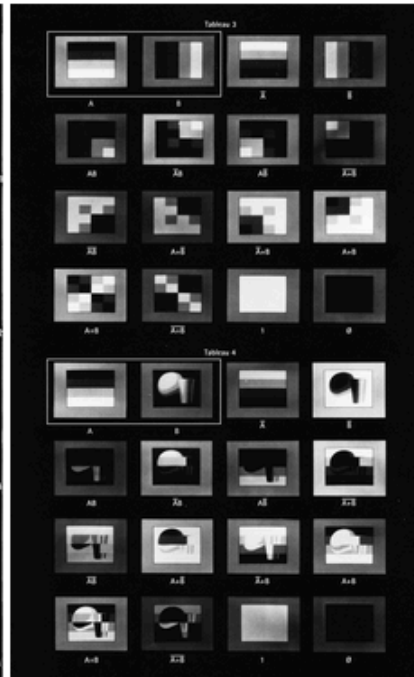
Right: Artifacts, video built with the Digital Image Articulator, 1980.

Screenshot from URL: [http://vasulka.org/Videomasters/pages\\_stills/index\\_14.html](http://vasulka.org/Videomasters/pages_stills/index_14.html)

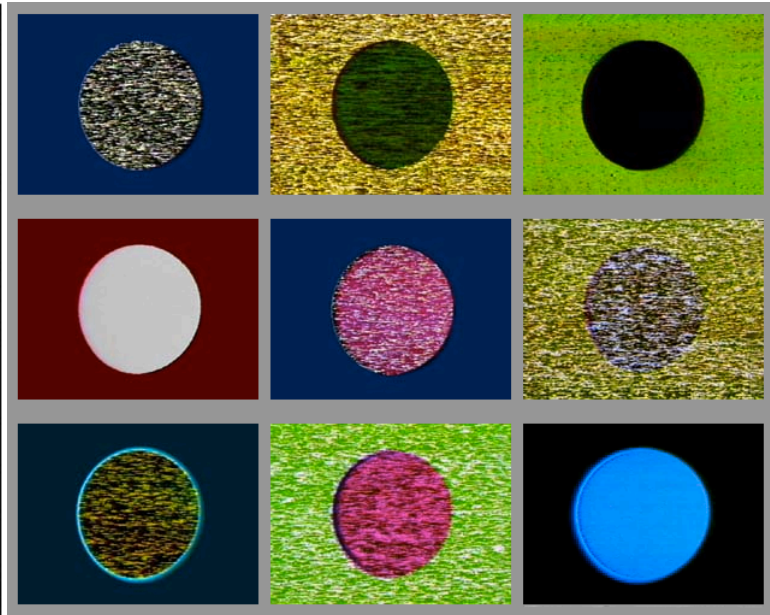
## Woody Vasulka (II)



Left: Didactic Video, Tableau IV, 1975 (Vasulka/Nygren: Video 1975, p. 13), demonstration of the Rutt/Etra Scan Processor.



Middle: Syntax of Binary Images, Tableau 3 & 4, 1978 (Vasulka/Weibel: Buffalo 2008, p.423), demonstration of the relations between the discrete elements "A" and "B" in "The Arithmetic Logic Unit (ALU)".



Noisefields, video realised with analog video tools, 1974.

Screenshot from URL: [http://vasulka.org/Videomasters/pages\\_stills/index\\_42.html](http://vasulka.org/Videomasters/pages_stills/index_42.html)

Bibliography with informations about the abbreviations used in the captions:

Dreher, Thomas: History of Computer Art. Chap. Bibliography. In: URL: <http://iasl.uni-muenchen.de/links/GCA-IXe.html>