TAPES IN DISTRIBUTION

In 1971 we changed from ½ inch C.V. to ½ inch A.V. reel to reel format. Since mid-1974 our tapes have originated on ¾ inch cassettes.

Although the format is irrelevant to means of distribution, it influences, in origination, the basic textural characteristic of the image, and also states the non-industrial conditions under which they were made.

The descriptions of each tape do not attempt to evaluate the image content itself, but to indicate the electronic concept, applied in the construction of taped images.

The tapes are in color unless otherwise indicated.

In a great majority of our tapes, we have used sounds generated by video images or images conceived from the sound spectrum.

Tools used in this process were standard audio synthesizing instruments, voltage controlled oscillators and other frequency generated circuits.

Until now, before our encounter with the computer, our expression of image-sound-image has been direct and linear, partly on purpose, partly because we lacked additional, more complex coding tools. Especially in its primitive interface of cause and effect, the process has revealed to us the behavior of the medium, its materiality and its control modes.

Our work has developed through design and use of special videotools, which have progressively contributed to the formal and conceptual complexity of our imagery.

In this process, we hve worked in close collaboration with several tool designers and builders, notably Eric Siegel, George Brown, Bill Etra, Steve Rutt, Don McArthur and Jeffrey Schier.

TOOLS

R/E Scan Processor
Produced in 1974 by Steven Rutt and William Etra.

An analog device using a programmable deflection system of the cathode ray tube to reshape standard television frames.

Dual Colorizer
Produced in 1972 by Eric Siegel.

A device which assigns color to black and white images according to the grey scale differences. "Dual" indicates that there are two separate colorizing channels.

Multikeyer
Produced in 1973 by George Brown.

A device which assigns up to six layers of discrete camera images, allowing manipulation of these images as if they were in real foreground/background relationships. Additionally, in this real time process, the re-assignment of the plane-location can be made. Another operational mode quantizes the grey scale of a single input into six discrete grey levels.

Programmer
Produced in 1974 by George Brown.

The complexity of the multikeyer operation necessitated automation of its processes. We therefore commissioned George Brown to construct a programmable control device able to store a sequence of operations and perform them automatically. Brown's approach was to construct a fully digital instrument.

H.D. Variable Clock
Produced in 1972 by George Brown.

A pulse generator operating in the regions of the horizontal sync (15,750Hz) capable of finely controlled deviation from the standard horizontal frequency. It enabled us to introduce the dynamic element of controlled horizontal drift to the video image.

Field Flip/Flop Switcher
Produced in 1971 by George Brown.

A variable speed programmable vertical interval switcher, selecting between two sources at specified field multiples.

Whenever a tool is specified in the tape description, the credit goes to those individuals.

tapes by Steina and Woody

1. *Sketches*, 1970
   Time: 27 min. b/w
   An assemblage of early experiments with elementary techniques of image processing based on a human action, or performance amplified by the electronic vocabulary. The sketches are: Red roses - Let it be - The kiss - Charlie's story - Alfons - Torture - Freeze dance.

2. *Calligrams*, March 1970
   Time: 12 min. b/w
   A re-scan camera is pointed at the television monitor displaying a pre-recorded tape. A misalignment of the horizontal hold causes a vertical multiplication of the image.

3. *Sexmachine*, September 1970
   Time: 6 min. b/w
   An electronically organized sex fantasy.

4. *Tissues*, October 1970
   Time: 6 min. b/w
   Various camera images are randomly inserted onto a pre-recorded tape. These forced edits become the source of abrupt voltage changes in the audio, when looped through a sound-synthesizer.

5. *Jackie Curtis' First Television Special*, 1970
   Time: 45 min. b/w
   A parody of the television specials personifying, in Jackie Curtis (an author and performer), the euphoric attitudes of the sixties Counter Culture in New York City.

6. *Don Cherry*, October 1970
   Time: 12 min.
   Don Cherry performs under the Arch in Washington Square, New York City. *Don Cherry* was co-produced with Elaine Milosh.

7. *Decay #1*, October 1970
   Time: 7 min., 6 sec.
   A face, pre-recorded on a videotape is manually forwarded on the playback, to produce image decay.
   Special Videotool: Dual Colorizer.


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8. *Decay #2*, October 1970

Time: 6 min., 37 sec.

An audio generated shape is pre-recorded on a videotape which is then manually moved on the video playback to produce image decay.

Special Videotool: Dual Colorizer.

9. *Evolution*, November 1970

Time: 16 min. b/w

A three-segment tape, containing fundamentals of the early works. Image originated from sounds, sound activated by a video feedback, and a horizontally drifting frame.

10. *Discs*, March 1971

Time: 5 min., 56 sec. b/w

A camera image of a reel is set in a rapid motion by a difference in horizontal camera drives. The image repetition results from a time delay, produced by re-entering the signal into the system; a visual echo. Sounds result from a video signal interfaced with a sound synthesizer.

Discs were produced as a single channel multi-screen environment (circle).

11. *Shapes*, March 1971

Time: 12 min., 43 sec. b/w

A pair of audio oscillators fed into a monitor input causes interference patterns with the faster frequency. By altering the shape of the audio waves and through oscillator drift, various permutations are produced.

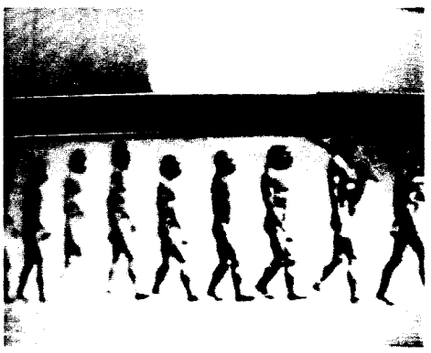
Shapes were produced with support from the Creative Artists Public Service Program.

12. *Black Sunrise*, March 1971

Time: 21 min., 8 sec.

A performance of energies organized into electronic images and sounds. Sound results from the video signals interfaced with a sound synthesizer.

Special Videotool: Dual Colorizer.



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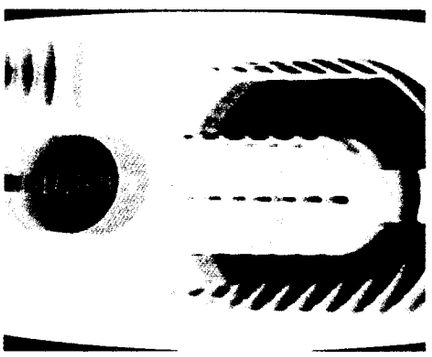

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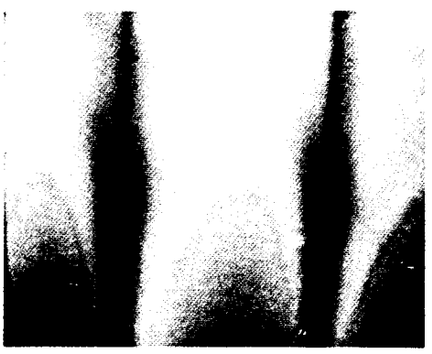

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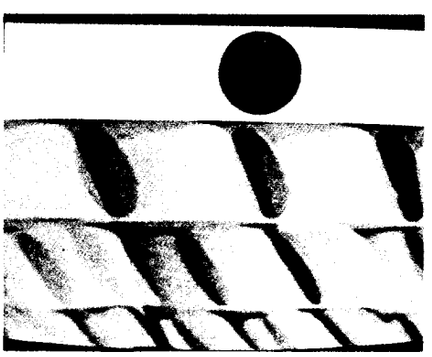

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13. *Keysnow*, October 1971

Time: 12 min.

A camera organized texture is set to travel at various harmonic speeds of the line frequency of video. Sounds are modulated by the image.

14. *Elements*, November 1971

Time: 9 min.

Variations of a video feedback as an image building material, controlled and processed through a video keyer. The sounds result from video signals interfaced with an audio synthesizer.

Special Videotool: Dual Colorizer.

Elements were produced for a videotape show at the Whitney Museum of American Art, New York City.

15. *Spaces I*, April 1972

Time: 15 min. b/w

First Segment (After Escher) simulates depth of a geometric texture, mirrored by a video feedback.

Second Segment (After Magritte) exchanges two textures of a stone through priority of a video keyer.

Third Segment (After Dali) processes sound generated shapes through two cameras juxtaposed 90 degrees and keyed over each other.

Fourth Segment (After Tanguy) uses two cameras in a feedback loop, combined through a special effects generator by a mode of horizontal split. The bottom part provided by a camera driven from an external clock is set to a rapid horizontal drift.

Sounds are products of, or are initiated by the images.

Spaces I was produced, with the support of the New York State Council on the Arts, as a horizontal multi-screen single channel environment.

16. *Distant Activities*, May 1972

Time: 6 min.

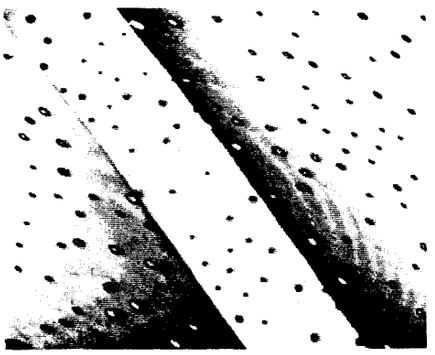
The protagonist is a video feedback, processed and controlled through a video keyer. Sound is from video signals interfaced with an audio synthesizer.

Special Videotool: Dual Colorizer.

17. *Spaces II*, August 1972

Time: 15 min. b/w

Three layers of textures and shapes are collaged through two cascaded video keyers. The independent control of the horizontal camera drives induces various horizontal movements of image planes. Sounds result from video signals interfaced with audio synthesizers.



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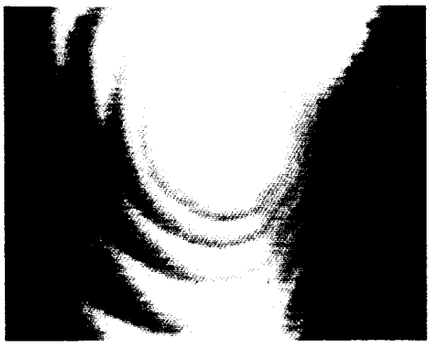

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Special Videotool: Multikeyer.

Spaces II was produced at the National Center for Experiments in Television at KQED in San Francisco, with the support of NCET and the National Endowment for the Arts. It was originally designed as a horizontal multiscreen single channel environment.

18. *Soundprints*, August 1972

Time: endless loops

Concentric images are constructed from two sound envelopes of a sound synthesizer, modulating X and Y inputs of a scan converter with a store/decay mode. The work is designed to indicate the material unity of both sound and image.

Soundprints were produced at the National Center for Experiments in Television at KQED, San Francisco.

19. *Home*, January 1973

Time: 16 min., 30 sec.

Still life transformed through the inner dynamic of electronic image processing.

Sequence 1 (Apple, shoe, book, instruments, bread): The difference in horizontal drive of the cameras produces horizontal drift of layered image planes, separated by keying.

Sequence 2 (Teapot, cup, onions, lamp): Two camera images are switched by a video sequencer. The lamp scene uses strobes locked to the video field rate.

Sequence 3 (Salt, bottle, bowl): Image planes are separated by keying and the bowl image is keyed over itself.

Special Videotools: Dual Colorizer; Multikeyer; Field Flip/Flop Switcher.

Home was produced with the support of the New York State Council on the Arts, and is dedicated to Brice Howard.

20. *Golden Voyage*, April 1973

Time: 28 min., 32 sec.

In this homage to Magritte, loaves of bread travel through electronic landscapes, assembled from camera images and pre-taped materials, layered through a multikeyer. The horizontal image-drifts result from a retimed horizontal drive of the cameras. Other movements are produced by panning, zooming and by a turntable.

Special Videotools: Dual Colorizer; Multikeyer; Programmer.

Golden Voyage was produced with the support of the New York State Council on the Arts.

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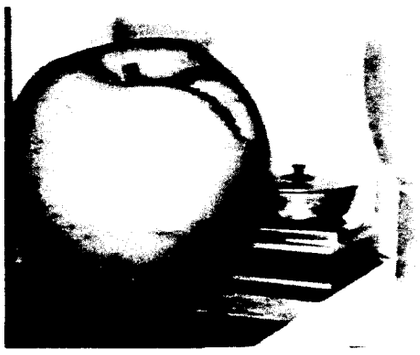

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21. *Vocabulary*, April 1973

Time: 5 min., 55 sec.

A program designed to convey in a didactic form the basic energy laws in electronic imaging. The process of keying, timing and system feedback is discussed visually.

Special Videotools: Multikeyer; Scan Processor; Dual Colorizer.

22. *Noisefields*, January 1974

Time: 12 min., 20 sec.

Colorized video noise is keyed through a circle. A Field Flip/Flop switch selects between the normal and inverted mode at various field rates. The energy content of the video modulates the sound.

Special Videotools: Field Flip/Flop Switcher; Dual Colorizer.

23. *1-2-3-4*, March 1974

Time: 7 min., 45 sec.

Exercise for four cameras and digitally controlled six input keyer. Images of the numbers one, two, three and four, joined later by oscillator textures and the color blue, are routed through the control matrix of the multikeyer, which re-arranges the order of the image planes. An interfaced tone generating sequencer relates the tone changes to the switching of the video sequences. Variable frequency clocks control the horizontal drifting of the images.

Special Videotools: Programmer; Multikeyer; H.D. Variable Clock; Dual Colorizer.

1-2-3-4 was produced with a videotool development grant from the New York State Council on the Arts.

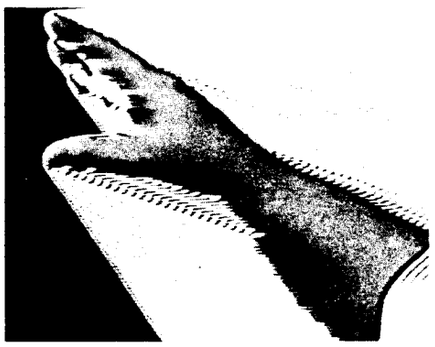
24. *Solo for 3*, April 1974

Time: 4 min., 18 sec.

Three cameras see different sizes of the number 3, while the fourth camera is set to a feedback. The image planes, layered through a multikeyer, are arranged through a switching matrix of the multikeyer and sequenced by a digital musical instrument. The horizontal drift of the images is controlled by a variable clock.

Special Videotools: Programmer; Multikeyer; H.D. Variable Clock; Dual Colorizer.

Solo for 3 (from the series of *1-2-3-4*) was produced with a videotool development grant from the New York State Council on the Arts.



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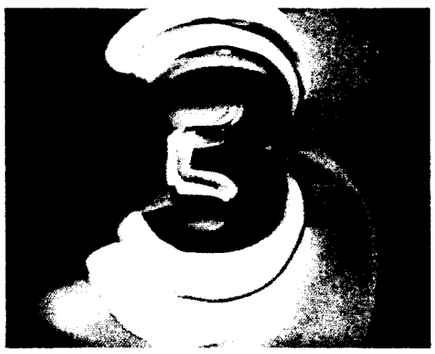

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25. *Heraldic View*, May 1974

Time: 4 min., 15 sec.

An oscillator generated pattern drifts over a camera view. Sharp bursts of voltages generated on an audio synthesizer are interfaced with control levers of a keyer, determining the opening of the front, oscillator generated image to the background camera image.

Special Videotools: Multikeyer; Dual Colorizer.

26. *Telc*, August 1974

Time: 5 min.

A portapak videotape of a renaissance town in Southern Bohemia, is displayed on a scan processor. The identical image signal is connected to the vertical deflection system of the scan processor, translating the energy of the image into a vertical position of scan lines.

Special Videotools: Scan Processor; Dual Colorizer.

27. *Soundgated Images*, Summer 1974

Time: 9 min., 15 sec.

A sampler of various interfacing modes of sound and image.

Special Videotools: Programmer; Multikeyer; H.D. Variable Clock; Scan Processor; Dual Colorizer.

Soundgated Images was produced with a videotool development grant from the New York State Council on the Arts.

28. *Soundsize*, September 1974

Time: 4 min., 40 sec.

A generated dot pattern is displayed on a scan processor. The random cycles of control voltages of a sound synthesizer are utilized in the control of both the sound pitch and image size.

Special Videotool: Scan Processor.

29. *Update*, August 1977

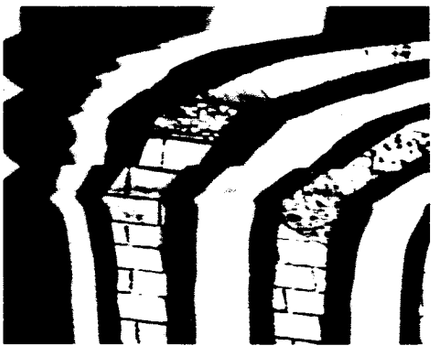
Time: 30 min.

(refer to description 30)

30. *Update*, April 1978

Time: 30 min.

In the process of developing digital imaging tools, we have encountered new experiences, going well beyond esthetic considerations. We have had to deal with a new generation of hardware, designed and constructed to our needs, and with a large body of knowledge, represented by the operational modes of the computer. At this stage, our main concern has been to communicate the structural level of the tools and images. We realize that this involvement generates its own area of information, has its own audience and its own developing genre.



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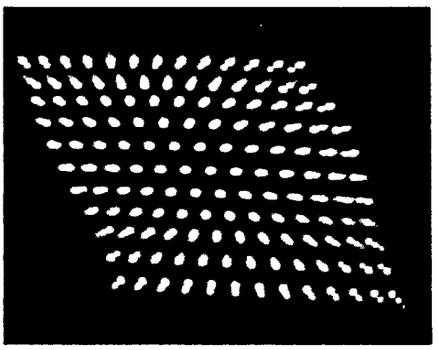


28

tapes by Steina

In the spring of 1975 I started to work on a series of installations and tapes, all involving mechanized modes of camera control. The effort resulted in a collection of works which I call Machine Vision, listed as 1-5 below.

Ordinarily the camera view is associated with a human view point, paying attention to the human conditions around. In this series the camera conforms to a mechanized decision making of instruments, with the movements, and attention directed towards their own machine to machine observations.

In these tapes I am also paying attention to time accumulation in a mix of real time with time inherited from each previous generation, off pre-recorded and then retaped segments.

1. *From Cheektowaga to Tonawanda*, June 1975
   Time: 36 min.
2. *Signifying Nothing*, June 1975
   Time: 15 min., b/w
3. *Sound and Fury*, October 1975
   Time: 15 min., b/w
4. *Switch! Monitor! Drift!*, November 1976
   Time: 50 min., b/w
5. *Snowed Tapes*, February 1977
   Time: 15 min., b/w
6. *Land of Timoteus*, March 1976
   Time: 15 min.

   A videotape of a volcanic coast of Iceland is a ground pictorial track for the electronic transformation of the landscape textures,controlled by sound envelopes and fast switching.

   Special Videotools: Field Flip/Flop Switcher.

   Land of Timoteus was produced from source material gathered in Iceland, September 1975.

7. *Flux*, November 1977
   Time: 15 min.

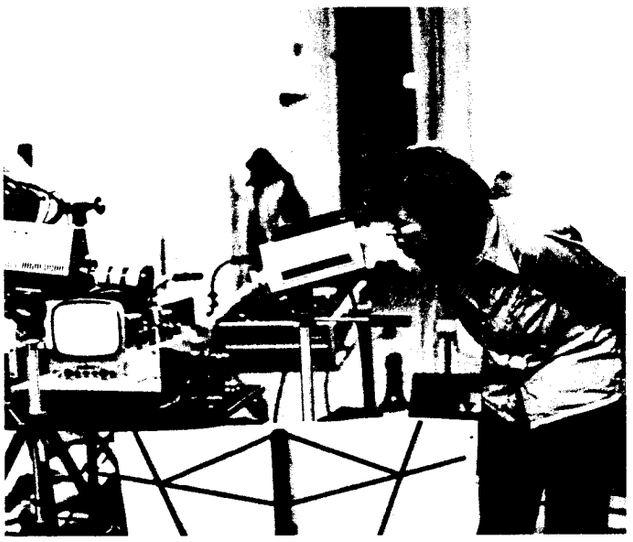
   A two character material, water flow and video noise are the basic sources of multi-directional movement within switched frames, or slow scanned noise fields.

   Special Videotools: Field Flip/Flop Switcher; Scan Processor.

   Special credit to the John Simon Guggenheim Foundation.

   Flux was produced from source material gathered in Iceland in July 1976.

1



tapes by Woody

1. *Explanation*, July 1974

   Time: 11 min., 40 sec.

   A generated crosshatch pattern, displayed on a scan processor and tilted by a locked waveform, is keyed over a synthetic landscape. A pair of slow ramp generators, connected to the height and width controls of the displayed system, provide gradual changes in the image position and size. The ramp generators are the simultaneous source for sound and image control.

   Special Videotools: Multikeyer; Dual Colorizer; Scan Processor.

2. *Reminiscence*, August 1974

   Time: 4 min., 50 sec.

   A portapak videotape of a walk through a farmhouse in Moravia, a place in Woody's youth, is displayed on a scan processor. The identical image signal is connected to the vertical deflection system of the scan processor, translating the energy of the image into a vertical position of scan lines.

   Special Videotools: Scan Processor; Dual Colorizer.

3. *C-Trend*, October 1974

   Time: 9 min., 47 sec.

   A camera view from a window is displayed on a scan processor. The identical image signal is connected to the vertical deflection system of the scan processor, translating the energy of the image into a vertical position of scan lines. The displayed raster is shaped with locked waveform generators and retimed by an external clock causing a slow drift.

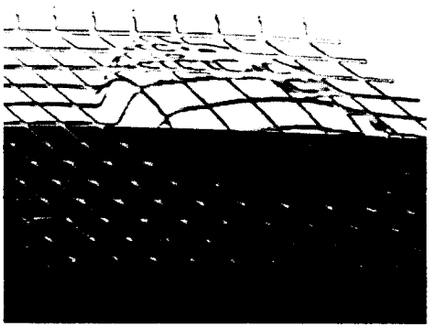
   Special Videotools: Multikeyer; H.D. Variable Clock; Scan Processor; Dual Colorizer.

4. *The Matter*, December 1974

   Time: 4 min., 7 sec.

   A generated dot pattern is displayed on a scan processor. Three basic waves, sine, triangle and square, generated by a locked waveform generator, are applied to shape the display. A slow ramp controls the image. The identical waves are the source of sound.

   Special Videotools: Scan Processor; Multikeyer.



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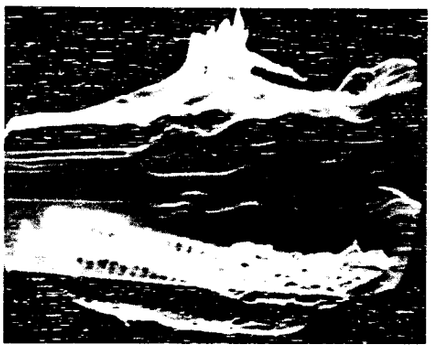

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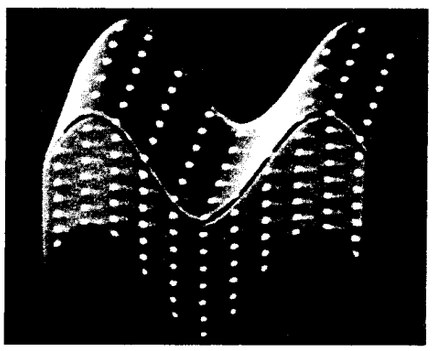


4

FILMS BY WOODY

Films numbered 1 to 7 were made during the years at the Film School of Prague.

Films 8 and 9 were produced through a Studio of Documentary Films in Prague, which provided the camera equipment, film footage and the postproduction expenses; the production itself was footed by Steina.

Film 13, *Time/Energy Objects*, was made during the artist-in-residency program of Artpark, Lewiston, N.Y.

Films 16, 17, 19, 22, 24, 25, 26, 28, 29, were made under a grant from NEA under a project "Recoded Images."

Except for film 2, all the films on this list are in black and white.

Films 13 to 29 utilize the R/E Scan processor to shape and carry out their pre-conceived transformations. These films are passive recordings of electronic images, having all internal imaging and syntactic composition finalized electronically. The original reason for making films at all, was the relative simplicity in making a stereo-scopic image interlock, still a dilemma in television.

Then I made more films to satisfy my curiosity about video, existing in the milieu of film.

Filmed in Czechoslovakia, 1960-63:

1. *Zdymadla (The Locks)*, silent, 16mm, 10 min., 1960 (lost)
2. *Ve dve odpoledne (Two P.M.)*, sound, 35mm, 16 min., 1961
3. *Jazz Festival v Karlovych Varech (in Carlsbad)* sound, 35mm, 20 min., 1962
4. *Zachytna Stanice (Withdrawal)*, sound, 35mm, 12 min., 1962
5. *Odjezd Brancu (The Recruits)*, sound, 35mm, 17 min., 1962
6. *U Pana Capka (Visiting Mr. Capek)*, sound, 35mm, 15 min., 1963
7. *Predmesti (The Outskirts)*, sound, 35mm, 17 min., 1963

Filmed in Iceland, 1964:

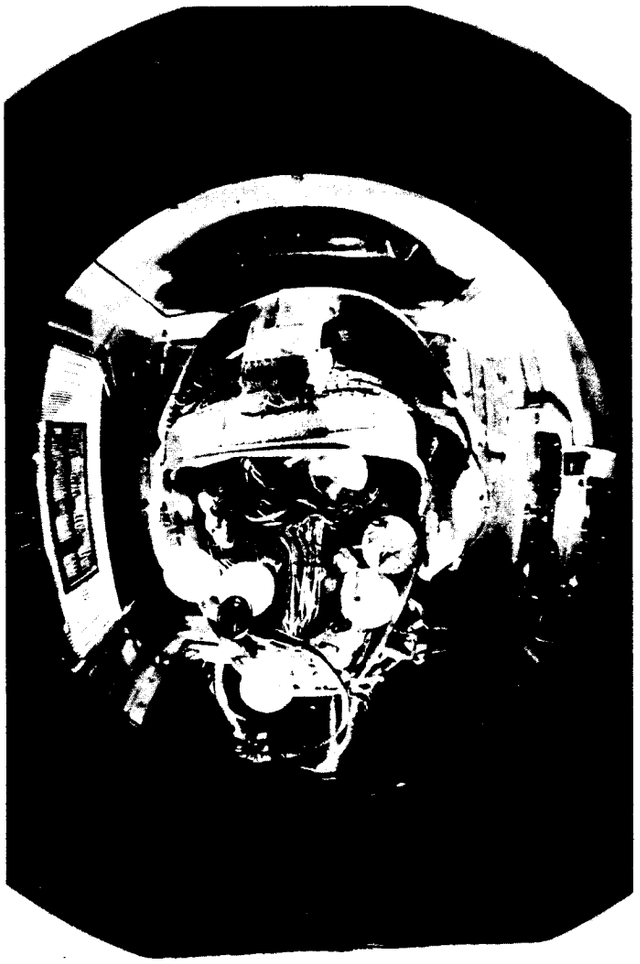
8. *Velrybarska Stanice (Whale Cutting Station)*, sound, 35mm, 12 min., 1964
9. *Sezona v Seydisfjordu (The Herring Season in Seydisfjordur)*, sound, 35mm, 20 min., 1964

Filmed in Algeria, 1965:

Two films for Bureau Politique of the Algerian Government. Films not completed. Winter, 1965

Filmed in U.S.A., 1968-77:

10. *Aimless People*, 3 screens, sound, 16mm, 4 min., 1968
11. *Peril in Orbit*, 3 screens, sound, 16mm, 4 min., 1968
12. *360 degree space records*, 3 screens, sound, 16mm, 4 min., 1968
13. *Time/Energy Objects*, stereo film, 16mm, silent, 13 min., 1975
14. *The City*, stereo sketch, 16mm, silent, 3 min., 1975
15. *Gorge*, stereo sketch, 16mm, silent, 3 min., 1975
16. *Noiseplane*, stereo film, 16mm, silent, 3 min., 1975
17. *Grazing*, 16mm, silent, 19 min., 1975
18. *No. 18 (Krysuvik)*, 16mm, silent, 11 min., 1975
19. *E-Object*, 16mm, silent, 11 min., 1976
20. *No. 20*, stereo film, 16mm, silent, 3 min., 1976
21. *No.21 (San Francisco streets)*, stereo film, 16mm, silent, 3 min., 1976
22. *Soundshape*, stereo film, 16mm, sound, 5 min., 1976
23. *No. 23 (Seal Cove)*, 16mm, silent, 11 min., 1976
24. *Torso*, 16mm, silent, 4 min., 1976
25. *No. 25 (Circular Noise)*, 16mm, silent, 5 min., 1977
26. *No. 26 (Rotating Panel)*, 16mm, silent, 5 min., 1977
27. *No. 27 (Frame Sizes)*, 16mm, silent, 5 min., 1977
28. *No. 28 (Face by Wave)*, 16mm, silent, 6 min., 1977
29. *No. 29 (Winding)*, 16mm, silent, 8 min., 1977



11

OTHER WORK BY WOODY

1. *A Meeting/Greeting* 1967 (not realized)

Two film cameras are placed at the top of a fountain, scanning (interlocked) 180 degrees of a space each completing a 360 degree survey.

Two men enter the field of vision of each camera and proceed around the fountain to greet each other.

The cameras are in an autonomous scan from the event, and maintain the presence of space rather than the recording of a human event.

2. *360 degree camera/scanner* 1968

I modified a 16mm camera and built a scanner by mounting a light weight mirror, slanted 45 degrees on a horizontally rotating ring. The ring had a large opening in the middle, allowing light/image captured by the mirror to reach the lens of a film camera positioned vertically. The film transport and rotation of the mirror (the position) were interlocked mechanically, pulling film around the aperture continuously.

I made recordings in two modes:
a) Strobed environment
b) Continuous slit recordings

In the strobed mode I used an open camera aperture which received a sequence of frames from the scene, illuminated by a stroboscopic light. Frames were to be projected by the opposite process, reconstructing the space. I made several recordings on a model scale, but failed to build the projector.

In the continuous slit recording I replaced the open aperture by a narrow slit, which organized and laid image on film, acting under a certain speed of film transport as a light timer. To my surprise, when I projected the films (as 360 degrees) the north and south portions of the image were of full height, but the east-west portions were collapsed into a slit size, forming a horizontal line only. This principle proved itself to be conceptually deficient in its applications as a general imaging utility.

3. *Projected strobe* 1968

I placed a high frequency strobe light (up to 1200 flashes/second) under the rotating scanner.

By varying the speed of rotation of the scanner and flashes of the strobe, I created a total, pulsating environment with relatively static (harmonic distribution between rotation and strobe rate) or dynamic (rotating, drifting) succession of images, reflected from the walls and ceiling.

4. *Hand-held Strobe Projector* 1968

I built a hand-held, pistol-like, free-aimed strobe projector with a 16mm film loop capable of placing images on any location within a darkened environment.

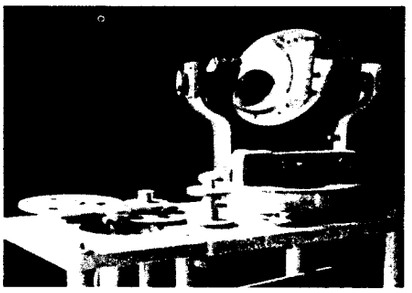
5. *Light-Activated Screen* 1968

I prepared a light sensitive screen, onto which an image of a face was gradually written in, decayed and refreshed by an occasional flash of a strobe, placed in the housing of a projector, holding the slide of the face.

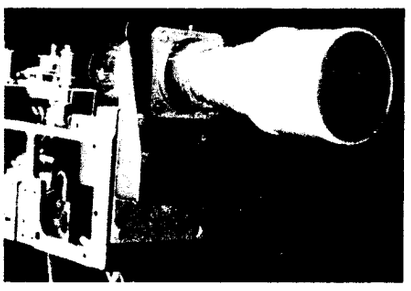
6. *Compositions in Music* 1968-78

Between 1968 and the present, notably in 1970 and 1976, I have produced a certain volume of sounds, mostly electronically. The compositions are oriented toward textural permutations; some, however, work in sound placement or movement in space or sound rotation through quad channel sound distribution. Except for a few performed events, all works are made on tape. The sound works have been played in The Kitchen, Albright-Knox Art Gallery, SUNYAB and WBFO.

Magic Mushroom
The West
D-Track
Brass Elevator
A Den
S-Structure
Allocated Sounds
Relief
Golden Voyage
Hysteria, Trivia, Choreomania (a large work in three parts)



2



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