The directors of EYE MUSIC, Janis Crystal Lipzin and Caroline Savage-Lee, will curate the series and in keeping with a curatorial approach, will offer program notes with each of the regular screenings. We feel that program notes are an important feature of educational entertainment such as we plan and a much needed component of such screenings.

We have designed the second aspect of LIGHT CURRENTS after the Exploratorium's SPEAKING OF MUSIC series, which is in its tenth year of presenting contemporary trends in music. We will invite noted working filmmakers to participate in a discussion and screenings series in order to introduce the audience to artists working with film and other forms of projected light. These in-person appearances will occur over four consecutive weeks twice during the year.

The Exploratorium setting provides an especially flexible site for non-conventional performances. Other Bay Area art spaces have been unable to present events such as we propose involving mixed media; moreover, the 200-seat McBean Theater at the Exploratorium is particularly well-suited to promote discussion between audience members and the artists. Together with the supplemental notes, both parts of the program aim at helping to cultivate perceptual sensitivity, necessary for producing or appreciating both art and science.

We feel that James Agee captured the spirit of our program when he said: "These films continually open the eye and require it to work vigorously; and through the eye they awaken curiosity and intelligence. That, by any standard is essential to good entertainment. It is unquestionably essential to good art."

SOME TOPICS FOR LIGHT CURRENTS PROGRAMMING

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Janis Crystal Lipzin, Program Director
November 1, 1982

Funds for portions of our programming are provided by the California Arts Council.
Thank-you for attending; we hope to see you at the next LIGHT CURRENTS.

**SCHEDULE:**

AUGUST 10/8 PM: IMPALED ON THE HORNS OF DILEMMA - 3-D Film & Video Installation by David Wilson and CHILDREN'S TAPES by videoartist Terry Fox.

AUGUST 24/8 PM: WIND, REWIND, DECAY - Visual sound performance by Mark McGowan and other works derived from visual scores.

An expanded and illustrated catalog for the entire LIGHT CURRENTS series will be available for $5.00 in the Fall from EYE MUSIC: Filmworks Series, Inc., 633 San Bruno Ave., San Francisco 94107.

EYE MUSIC: Filmworks Series is a non-profit organization founded in 1975 to support film as a fine art in the spirit of experimental film pioneer Marie Menken whose film "Eye Music in Red Major" inspired our name.

The Exploratorium also sponsors free films curated by Liz Keim each week-end. LIGHT CURRENTS is presented as part of the San Francisco Summer Festival.

We extend our heartfelt thanks to these individuals and organizations who have made this event possible:
The California Arts Council
Bill Baldewicz
Liz Keim
Virginia Carollo Rubin
Rick Smith & Bauer Audio-Video

Steve Anker & the Cinemathèque
Marilyn Bancel
Frank Oppenheimer
Larry Shaw
All the participating artists & volunteers
*PROGRAM NOTES*

Möbius Film Loop Propellers by Van McElwee (3/4 in. videotape, color, stereo 5 min., 1982)

A möbius strip is a one-sided surface formed by holding one end of a rectangle fixed, rotating the opposite end 180 degrees, and then applying it to the first one. The term is derived from the name of the nineteenth-century German mathematician, August F. Möbius.

"A film spliced into a Möbius strip would, with each repetition, reverse a scene to its mirror image. The propellers act as indicators of this reversing-space dynamic, reinforcing it with their movements.

This piece ties together mathematical form, time and perception in an unusual way. It requires that the viewer understand what a Möbius strip is, and coaxes further thinking as to how that object would operate in time, in a film projector. Time is repeated, and space is reversed, with each repetition. The very simple final form creates some interesting conceptual 'explanations' for its movement: (1) two infinite moving lines of propellers intersecting each other, (2) one propeller making a sideways figure-eight back and forth through the picture frame, and (3) an ascending spiral of propellers." -V.McE.

Earth Scribbles (3/4 in. videotape, color, stereo, 2 min., 1982)

"A portrait of the Planet. The Earth is made up of many layers, or concentric spheres: its core, its rocky crust, the layer of organic life, and the layer of atmosphere, and now a layer of electronic communications and thought. For Earth Scribbles, hundreds of satellite weather photos were drawn on, colored and processed electronically, and animated into a four-dimensional map." V.McE.

VAN McELWEE has been teaching video at Washington University since 1978 and is presently teaching video and film-making at the School of Fine Arts at Washington University in St. Louis. His work has been exhibited and broadcast in the U.S. and in Sweden. "My involvement with video began as a culmination of work in two normally unrelated areas -- printmaking and sound. For me, video is an ideal medium for discovering and expressing insights and ideas. I use video to explore and deal with perception of time, order and disorder and the direct effect of form upon the listener/viewer. Sound and image serve the same ideas as two aspects of one form. The tapes are intended for a wide variety of viewing situations and operate as environmental elements as well as objects for focused attention." V.McE.

South-Western Landscapes by Steina and Woody Vasulka (3/4 in. videotape, color, stereo, 18 min., 1982)

"South-Western Landscapes is a video tape in five parts subtitled: 'Low Ride,' 'Sky High,' 'Somersault,' 'Rest,' and 'Photographic Memory.' Within each segment, a specific 'way of seeing' is used by mechanical/optical means." W&S.V. Produced with funds from New Mexico Arts Division and National Endowment for the Arts.
Programs in the summer "Light Currents" series will be selected from among these broad themes:

**MAPPING & GEOGRAPHY**
- "A Walk Through 'H'" by Peter Greenaway (film)
- "Southwestern Landscapes" by Steina Vasulka (video)
- "Earth Scribbles" by Van McElwee (video)

**MATHEMATICS & SYSTEMS**
- "24 FPS" by Taka Timura (film)
- "Articulation of Boolean Algebra for Film Opticals" by Tony Conrad (film)

**PHYSICAL PHENOMENA**
- "Horse Science Series" by Rob Danielson (film)
- "After Dinner Science" by Esther Shatavsky
- "T.S.L. A Scientific Biography" by Tom Brener (film)
- "The Children's Tapes" by Terry Fox (video)

**REFRACTION OF LIGHT**
- "Text of Light" by Stan Brakhage (film)

**ILLUSION & PERCEPTION**
- "Three Transitions" by Peter Campus (video)
- "Still Life" by Jenny Okun (film)
- "Frame" by Richard Serra (film)
- "Gulls Don't Fly on Light" by David Gearey (film)
- "The Wheels of Time" by Tim Kennedy (film)

**TIME**
- "The Visit" by Tim Bruce (film)
- "Blackbird Descending- Tense Alignment" by Malcolm LeGrice (film)

**COMMUNICATION SYSTEMS**
- "Microcultural Events in Ten Zoos" by Ray Birdwhistell (film)
- "Paul Revere" by Joan Jonas and Richard Serra (film)

"LIGHT CURRENTS" summer series will take place on alternate Friday evenings in July and August at 8:00 PM in the Atholl McBean Theatre at the Exploratorium: July 8, 22, August 5 and 19th. Admission will be $3.50 per show; Exploratorium members $3.00. We invite subscriptions for the series at $10 for all four shows. If you would like to subscribe, please leave the attached subscription forms with your check with the usher or mail to:

EYE MUSIC: Filmworks Series, Inc.
633 San Bruno Avenue
San Francisco, CA 94107

Donations to EYE MUSIC and The Exploratorium are appreciated and are necessary to make programs like these possible. Contributions to both organizations are tax-deductible.

I would like to support "LIGHT CURRENTS" by subscribing to the 1983 Summer Series. Enclosed is my check for $ for ___ subscriptions @ $10.00.
Please send my series pass to:

Name __________________________
Address ________________________
Zip ____________________________
Telephone ______________________

EYE MUSIC: Filmworks Series, Inc./633 San Bruno Avenue/San Francisco, CA 94107
[415] 648-3847
MAXWELL'S DEMON (16mm film, 4 min.) by Hollis Frampton. An homage to the physicist James Clerk Maxwell, father of thermodynamics and analytic color theory whom I have admired. His famous Demon, mythic and microscopic...is a perfectly imaginary being who deals entirely in pure energy. -HF In scientific theory, Maxwell's Demon is a hypothetical being of intelligence but submicroscopic in size imagined to demonstrate limitations of the second law of thermodynamics. In this film, Frampton tints ocean waves with the primary colors of light to make reference to Maxwell's analytic color theory and hypothesis about electromagnetic waves of which light consists. By using found footage of a man repeatedly performing exercises, Frampton draws a parallel between the man and an engine where a chemical conversion is producing heat, some of which is lost out of the body. This act illustrates the second law of thermodynamics which can be stated that no engine can be completely efficient; some of the heat input to perform work (or exercise) must always be lost. Frampton teaches filmmaking at the State University of New York at Buffalo.

TWO SPACE (16mm film, 8 min., 1979) by Larry Cuba. The artist uses hundreds of luminous dots that he submits to a series of competitive metamorphoses creating a diverse array of animating figures according to a rigorous choreography. In this case the computer animation establishes a parallel between visual perception and a structure of linguistic or mathematical order: it is concerned with establishing a new organizational field for the esthetic material. -Raphael Bassan, Cinema et Review. Cuba's exquisite compositions depend on mathematical formulas. As he points out, art and arithmetical proportions have a long connected history. Musicians, of course, depend on mathematical relationships. And Renaissance painters used mathematical skills to perfect perspective drawings...-Martin Perlman, Santa Barbara News and Review. TWO SPACE is based on the symmetry of the plane - the title being a contraction of "two-dimensional space" which is the plane. The plane has certain symmetry properties which are defined mathematically in the field called group theory; a "group" being a kind of pattern. There are 17 symmetry groups, 17 kinds of patterns you can create from a single figure...It turns out that Islamic artists who decorated their temples with tile patterns discovered as mathematicians, all 17 symmetry groups. -L.C. In TWO SPACE the [black and white] patterns of moving symmetrical shapes produce visual treats --afterimages in color and the illusions of 'figure-ground' reversal. -Perlman. What I'm dealing with, the images themselves, are not as much of a concern to me as individual frames, as they are as moving images. -L.C. The sound track is a javanese gamelan composition. Cuba lives in Santa Cruz and will be present to answer questions at the 8:00 showing.

AN ALGORITHM (16mm film, 10 min., 1977) by Bette Gordon. Uses loops of positive and negative footage of various lengths calculated by a mathematical algorithm to produce visual kinetic rhythms which move in and out of phase. Gordon teaches filmmaking at Hofstra University, Hempstead, NY.

MUSIC BY TEETH (3/4" videotape, 15 min., 1976) by Miriam Amie. I rub my teeth and this makes noise. The varying lengths and thicknesses of my teeth dictate the tone produced. I, myself, hear this sound internally through bone conducted vibrations. Persons listening directly to the noise hear the sound through air conducted vibrations. By electronically recording the sound, those who wish, are able to hear the sound through yet another medium of conduction. The film is meant to bring to the viewer's attention that vibration, therefore sound, travels through various and multiple mediums (including internal ones), at any given moment. The realization of this fundamental principle is a basic beginning when studying acoustics on any level. Amie lives in Atlantic City, NJ where she works in the gaming industry.