OFFICIAL PROGRAM
THE 1973
International
Computer Arts
Festival...
April 1 through 14

THE FIRST SHIFT-KEY TYPEWRITER—1878
Graphics exhibited at the Computer Arts Festival

George Chaikin
Courant Institute of Mathematical Sciences
New York University, New York
Graphics co-ordinator of the Festival
One of the chief implementers of the
computer language ARTSPEAK, Mr. Chaikin is
also an architect. He is involved with many
different applications of computer graphics,
and does much consulting and research work.

Vladimir Drozen PhD
Hradec Králové, Czechoslovakia
9 stills from the film "CREATION"
"The pictures are photographic records of the
reflections of the sunlight from undulating
water surfaces, thus representing solutions-
at particular moments of time- of the two
dimensional wave equation under specific-
rather complicated- boundary and initial con-
ditions. They have been obtained without any
computing technique at all"- from Dr.Drozen's letter

Cyprienne Schroeppel
M.I.T., Cambridge, Massachusetts
14 x 16 inch needlepoint of one frame of the movie
"SOLAR CORONA" by Michael Beeler (film entry)

Ramesh Misra
ARKSHOP, New Delhi, India, and New York.
Computer animation by Walter Wright
Photography by Ramesh Misra.
Generated at Dolphin, Computer Image Corp.

Lou Katz Columbia University, New York
"SPACE, TIME & SUBSTANCE" 40 slides
"These pictures are a part of a study of
three dimensional surfaces and shapes, and
two dimensional patterns that change with
time. The "double" images are stereoscopic
pairs, and can be viewed in 3-D by those
who can "cross" their eyes. These slides
were made using an ADAGE AGT/50 graphics
computer, using programs by Lou Katz, Mr.
Reidar Bornholdt, and Mr. Christos Tountas."

Aaron Marcus
Princeton University, Princeton, New Jersey
"Computer art promises to challenge more
profoundly than ever before what is real and what
is not." -Aaron Marcus; film: "THE BEGINNING"

Paul Hrozenchik, Bruce MacFarland
students of George Chaikin, New York

William Fetter - see film entry

Gary Nelson - see music entry
Computer generated musical notation
Afternoon events of the Computer Arts Festival

Sunday April 1 5pm Lecture:  
**COMPUTERS AND THE ART OF MEDICINE**
Juan de Dios Pozo-Olano, PhD, Fellow in Neurology  
Mount Sinai School of Medicine, New York  
Beginning with a brief survey, Dr. Pozo-Olano will discuss in detail the work that he has done using digital computers to record graphic representations of brain waves. Illustrated by slides.

Friday April 6 5pm Workshop:  
**VIDEO SYNTHESIS AND COMPUTERS**
Walter Wright - see video entry

Saturday April 7 2pm SYMPOSIUM  
**COMPUTER COMPOSITION**: Comparison of Aesthetics and Techniques in All Media. All artists in the Festival are invited as panelists. Chairman of the meeting, George Chaikin. Proceedings will be video taped, 2 inch crews are welcome. Microphones open to the floor.

Sunday April 8 5pm Lecture:  
**COMPUTER MUSIC** Charles Dodge  
Music co-ordinator of the Festival

Sunday April 8 1-4pm; Monday & Tuesday 9,10 5-7pm  
**COMPUTER INTERACTION** Computers on hand will be open to public use, to generate patterns, carry on conversations, etc. Computers courtesy of Leasco Response Co, Electronics Associates Inc, and Pratt Institute.
Special workshop: Fred Stern, Sunday 1pm

ALL EVENING PROGRAMS START AT 8PM, AND INCLUDE MUSIC, VIDEO & FILM:

Films shown during the Computer Arts Festival....continued - see next page

April 10, 11  Doris Chase  
"CIRCLES"  
Doris Chase now lives in New York, and is working on a film named SQUARES. The film "CIRCLES" was made using a 4u/2u Stomberg Carlson plotter, computer analyst Bob Tingley. This film was produced with computer graphics animation techniques developed under the direction of William Fetter at the Boeing Aircraft Company, Seattle, Washington.

April 10, 11  Aaron Marcus  
"THE BEGINNING" - see graphics entry
Films shown during the Computer Arts Festival, 1973, at the Kitchen.

April 1, 2 William Fetter
"VISUAL OVERTURE" "FILM SAMPLER"
Previously the director of computer graphics at the Boeing Aircraft Company, Seattle, William Fetter is currently adapting the technology he developed to other design/graphic representations, as Head, Computer Graphics Laboratory, Department of Design, Southern Illinois University, Carbondale, Illinois.

April 3, 4 Michael Beeler (will be repeated, Apr. 12)
"SOLAR CORONA"
Artificial Intelligence Laboratory, MIT Cambridge, Massachusetts. Music by Peter Samson.
SOLAR CORONA was made from data taken from August 14, 1969 through May 7, 1970, O3O-VI, one of the Orbitting Satellite Observatories. The sunlight which was measured in this experiment is only that of the corona, above the surface of the sun, is light of only one color, (wavelength 625 + or - 3 Angstroms), light from a heat of about 2 million degrees.

April 3, 4, 12 Peter Struycken
"IMAGE PROGRAMME-1-1972"
Galerie Swart Amsterdam, Holland
Computer programme by Drs. S. Tempelaars
"In order to gain acquaintance with the premises applying to the reciprocity between element and structure, the changing degree of variation being the criterion, I make models which relate to this problem...One of these models is my image programme 1-1972." - from Peter Struycken's letter.

April 5, 13, 14 John Whitney
"MATRIX III"
The Whitney family is famous for computer movies. This is John Whitney's newest film, sent from Pacific Palisades, California.
Thanks to I.B.M. for making, this print, available.

April 6, 7 Stan Vanderbeek
University of Southern Florida, Tampa Florida
Mr. Vanderbeek is a famous filmmaker, formerly at M.I.T.

April 8, 9 Lillian Schwartz
1) "PIXILLATION" 2) "UFO's" 3) "MUTATIONS" 4) "ENIGMA" 5) "APOTHEOSIS" 6) "AFFINITIES" 7) "GOOGLEPLEX" 8) "MATHOMS"
Independent filmmaker, Maplewood, New Jersey

April 8, 9 Arthur Layzer
"MORNING ELEVATOR"
Steven's Institute of Technology, Rutherford, New Jersey
Resident Visitor at the Bell Telephone Laboratories.
"The digital computer has negative expressivity—a black border that can be used to bring out human expressivity."
Assistance in programming from Joan Miller, Bell Labs.
...ALSO: two pieces of computer music—"PIECE FOR SIX VOICES", "FANFARE"
Music events in the International Computer Arts Festival

April 1, 2 JOSEPH OLIVE "STUDIES # 4 & 5"
Bell Telephone Labs
Murray Hill, New Jersey
Employed in speech and acoustics
work at Bell Labs, Mr. Olive has
a PhD in physics, and is a respected
composer. He uses the GROOVE computer
system, with 14 lines from a PDP-10.

April 3, 4 THOMAS WELLS "APOTHEGOM G.K."
Director of the Electronic Music Studio
The University of Texas at Austin, Texas

April 3, 4 JOEL GRESSEL
Princeton University, Princeton New Jersey

5, 10, 11 CHARLES DODGE "THE SPEECH SONGS"
School of Music, Columbia University, New York
Mr. Dodge is an internationally known lecturer
on the subject of computer music, and a composer
of renown. He is the music co-ordinator of this
Festival.

6, 7 EMMANUEL GHENT 1) "PHOSPHONES" 2) "COMPUTER
BRASS" 3) "INNERNESS"
Bell Telephone Labs, and
New York City. Well known as a composer of
instrumental and electronic music, Emmanuel
Ghent has in recent years devoted himself to
synthesizing music and stage lighting by means
of the GROOVE computer system.

8, 9 GARY NELSON
Purdue University, West Lafayette, Indiana
4-Channel tapes, using MUSIC65, (a descendant
of MUSIC4). Also doing work in computer gener-
ated musical notation, in exhibit in the Kitchen.
With Mr. James Lesko, who uses a computer to
generate plans for steel sculpture, Mr. Nelson
is combining sound with sculpture, by placing
speakers within the object.

8, 9 MAX MATHEWS 1) "RUNNING MAN SUITE,
2) "ELEPHANTS MAY SAFELY GRAZE", 3) "SALES
4) "MISTAKES"
Bell Telephone Labs, Murray Hill
Max Mathews is a widely published author, an
engineer, and a composer. He is largely respons-
able for the highly adaptable GROOVE computer
system, which so many composers use, at Bell Labs.

4, 5 STEPHEN SMOLIAR "SRVAR 6, CLIFF 2, SRVAR 3"
&12th/ Department of Computer Science, Technion
Haifa, Israel. Stephen Smoliar has devised a
programming language EU TERPE. The various pieces
use the same program, with different thematic
subroutines patched in.

5, 12 EZRA SIMS "FROM AN OBOE QUARTET"
Artificial Intelligence Lab, M.I.T.
Cambridge, Massachusetts
Music events in the Computer Arts Festival

Ezra Sims uses the PDP-6/10 system, and the EUTERPE program devised by Stephen Smoliar.

April 10,11  F. RICHARD MOORE
1) "VARIANTS"  2) "PIXILLATION" (original soundtrack)
Bell Telephone Laboratories, Murray Hill, New Jersey
"Technological art will succeed or fail according to the success of the real time interaction as opposed to only programming abstract structures. We have to maximize the capability to play the machine as an instrument."

April 9  ALISON KNOWLES  "PROPOSITION 4 (SQUID)"
New York
Performance piece for four voices

April 13,14  ALVIN LUCIER
"EMSIM 1 (THE BIRD OF BREMEN FLIES THROUGH THE HOUSES OF THE BURGERS )" 1972
Wesleyan University, Middletown, Connecticut
A computer controlled sound environment, commissioned for Radio Bremen, using a PDP-10, four channels.

April 13,14  RICHARD COFF
Wesleyan University - student of Alvin Lucier

April 17  LEJAREN HILLER
"THE ILLIAC SUITE FOR STRING QUARTET"
Performed live, New York debut. Musicians from the State University of New York, Buffalo
The historic Iliiac Quartet, never before played in New York, dates from the 1950s, and is a pioneering work, using a computer to carry out serial techniques, producing a veritable string quartet. Other works will be performed. Thanks to Jim Burton, of the Kitchen.
Video events in the International Computer Arts Festival, April 1973

April 2, 3 Bill Etra "IMAGE WARP"
Artist-in-residence WNET-TV Ch.13, NYC
Live performance, debut of the new
R U T T/E T R A video synthesizer.
The synthesizer, designed in conjunc-
tion with engineer Steven Rutt, has
many advantages over previously
existing systems—"Pray for sync!"

April 4, 5 David Dowe, Jerry Hunt
1) "HARRINAN PLAYING HEISENBERG/EYES"
2) "ELECTRIC EXO-SKETCH"
Southern Methodist University
Dallas, Texas
Dancers are able to control video and
audio signals by mia-electric pick ups
which respond to discrete muscle move-
ments; the X and Y co-ordinates are
fed through a scan converter, allowing
the two way reversibility of
pictures→sound.

April 6, 7 Walter Wright, New York
An architect, and a design engineer,
he first became interested in computer
generated images in 1965. Computer
graphics system at University of Water-
loo, Ontario, Canada; Computer animator
for Dolphin Productions, Computer Image
Corp, NYC; presently Artist-in-residence
at WSKG-TV in Binghamton, NY, is design-
ing and building his own video synthesizer.

April 8, 9 Ed Emshwiller "SCAPE MATES"
Well known filmmaker, and Artist-in-residence
at WNET-TV Ch 13, New York.
Made at the Experimental Television Lab,
and at Dolphin, Computer Image Corp.;
SCAPE-MATES is a hauntingly beautiful
voyage into the depths of man/machine
interaction, using expressive dance motions
and computer animation, and geometric graphics.

April 10, 11 Nam June Paik
Artist in residence at WNET Ch.13, New York
One of the Great Grand Parents of Video, in
fact said to be the "Mao Tse-Tung of video;"
Nam June Paik is a pioneer in the use of
electronically distorted images. A Korean,
he has an engineer's degree from Tokyo,
and is a famous artist of the avant-garde.
He will show a film made with Michael Noll, James Tenney,
of Bell Laboratories; and some video tapes
of the synthesizer he designed with Shuya Abe.

April 10, 11 Jud Yalkut "THE WHIRLING ECSTASY"
Video-Film Collective, New York
Thanks to Walter Wright
"How can one undergo transformation without being shattered?"
—Jalal'ud-din Rumi
April 12, 13, 14    Dimitri Devyatkin
"SACHDEV", "STEEP TURNS", "MOTOWN"
Thanks to Walter Wright for the computer animation, and assistance.

Ron Hays
Artist-in-residence at WGBH-TV, Boston, Massachusetts
Ron Hays, born in Nebraska, is a widely seen video artist. He plays the Paik/Abe synthesizer as a fully responsive, improvisatory instrument.

SYMPOSIUM: April 7 at 2pm*** Will be video taped.
Other 1/2 inch video recording crews are welcome—panelists will have two microphones, one on the floor, mixed.

THE COMPUTER ARTS FESTIVAL is supported by a special grant from the New York State Council on the Arts. The Kitchen is run non-profit by artists, and audience contributions are split to pay the artists and the Kitchen's expenses.

Special thanks to Mr. Shridhar Bapat, of the Kitchen for continual supporting assistance. This Festival would not have been possible without the support of the entire Kitchen: Jim Burton, Bob Stearns, Michael Tschudin, Woody and Steina Vasulka, and Howard Wise.

Graphics coordinator: George Chaikin
Music co-ordinator: Charles Dodge
General Co-ordinator: Dimitri Devyatkin

ALL EVENING PROGRAMS BEGIN AT 8PM, lasting approximately 2½ hours. Programs subject to change without notice.