

GENERATIVNÍ UMĚNÍ,
POČÍTAČOVÉ UMĚNÍ,
ALGORITMICKÉ UMĚNÍ

VLIV KYBERNETIKY A INFORMAČNÍ TEORIE NA UMĚNÍ – GENERATIVNÍ ESTETIKA

Hledání vědeckého symbolického jazyka, který není zaměřen na komunikaci, ale má sloužit jako nástroj k hledání pravdy

myšlenky univerzálního matematického jazyka, s nímž lze popsat svět
(Leibnitz, Babbage, Turing)

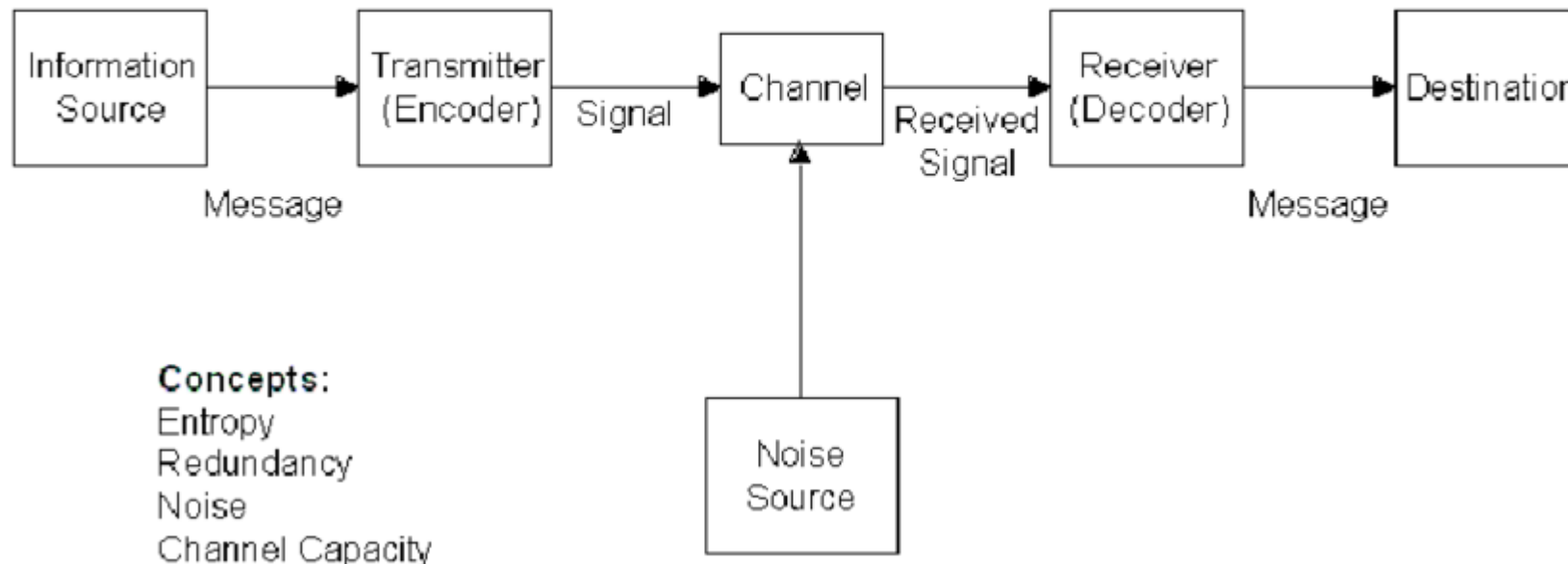
Informace jako klíčový koncept prostřednictvím kterého porozumíme
estetickým procesům

Nový pohled na informaci v oblasti kybernetiky: Shannonův koncept informace

- Dvě možnosti: 0, 1 – jednobitová informace
- Čtyři možnosti: 00, 01, 10, 11 – dvoubitová informace
- 256 možností – osmibitová informace
- Počet potencionálních kombinací kódu = počet vzkazů, které lze vytvořit

dílo nahlíženo jako informace, která prochází komunikačním systémem

The Shannon-Weaver Mathematical Model, 1949



RACIONÁLNÍ ESTETIKA, INFORMAČNÍ TEORIE, KYBERNETICKÁ ESTETIKA

výzkum zaměřený na hledání objektivních (měřitelných) estetických vlastností uměleckého díla

pokus o kvantifikaci estetické hodnoty díla

Max bense

Abraham Moles

Herbert W. Franke

PRAKTICKÉ REALIZACE TEORIÍ - PARTICIPATIVNÍ A GENERATIVNÍ ESTETIKA – HLAVNÍ ZNAKY A STRATEGIE

Vytváření děl podle určitých pravidel

Důraz na procesy opakování, variace a kombinace

Tvorba estetických situací

Práce s koncepty redundance a komplexity

Do popředí se dostává komunikativní dimenze umění

Spojení vědeckých otázek a tvorby umění – realizace experimentů

PŘÍKLAD VLIVU KYBERNETIKY NA UMĚNÍ – VÝSTAVA CYBERNETIC



Peter Zinovieff
Ihnatowicz



Gordon Pask - The Colloquy of Mobiles



Edward

PŘÍKLAD VLIVU KYBERNETIKY NA UMĚNÍ – VÝSTAVA CYBERNETIC SERENDIPITY

Serendipity
Serendipity

the faculty of making
happy chance discoveries
by means of control and communication machines
both human and electronic

An exhibition
in addition demonstrating how man can use the computer and how technology has extended the scope of his creativity and inventiveness
which can be seen in the form of a computer which can be programmed to do anything which is possible within its limits
computer-generated graphics
computer-generated film
computer-generated musical compositions
computer-generated text
computer-generated images
computer-generated sounds
computer-generated music

and
other
serendipitous
manifestations

Institute of Contemporary Arts
South House, The Mall, London WC1R 4EJ
August 2 - October 20

August 2 - October 20, 1968
During the course of the Electronic Serendipity exhibition at South House, The Mall, London W.C.1, a series of lectures will be held:
admission - free
204 members - 5/6
all by invitation - season ticket - £3

Thursday August 8
Tuesday August 13
Thursday August 15
Tuesday August 20
Tuesday August 27
Tuesday September 3
Thursday September 5
Tuesday September 10
Thursday September 12
Thursday September 19
Tuesday September 24
Thursday September 26
Tuesday October 1
Tuesday October 8
Thursday October 10
Thursday October 17

Class 3. Miller
Music in the fields of anthropology, computer, international scientific cooperation and the visual arts.
REFLECTIONS ON THE DIFFERENCES BETWEEN SCIENCE AND ART

Professor Herbert Ross
Composer and musicologist at School of Music of the University of Illinois.
COMPOSITIONS: EARLY INSTRUMENTAL MUSIC

Charles Ellis
Director of the Computer Music Centre in New York
MUSIC: WITHOUT LABELS

R.D. Thomas
Sub-director at Cambridge School
New musical systems for literary texts
MUSIC AND INFORMATION

Dr. Christopher East
Clinical Research Fellow
in the Division of Computer Science
at the National Physical Laboratory
SLEEPING AND AWAKING

Mr. Colin
Writer, dramatist, broadcaster and consultant.
In making a study of the impact of the computer on society
SOUNDING TO SUNDAY EVENING

Professor R.D. King
of the Department of Mechanical Engineering
Queen Mary College, London
QUESTIONS IN THE SERVICE OF MAN

Dr. Gordon East
Experimental psychologist and automation
DIRECTOR OF RESEARCH IN ARTS RESEARCH CENTRE,
CAMBRIDGE ON SEX AND SENSATION

Janis Rowland
Composer, 1968 prize winner of the BBC Congress
computer-composed music competition 1968
UNUSUAL COMPOSITIONS IN MUSIC AND ITS FORMULATION

Mr. A. S. Miller
Professor in the area of computer
in the Department of Applied Mathematics in general
THE COMPUTER AS AN AID TO LITERARY CRITICISM

John Gossel
Composer and Director of the
School of Music, University of Florence
THE COMPUTER IN MUSIC

Professor Robert Rice
of University of Cambridge, sociologist and computerist
concerned with the application of computer
and information theory to literature and music
THE SOCIAL IMPLICATIONS OF ART WITH COMPUTER

Professor J.A. Robinson
of the Institute of Computer Science in London
THE CONTRIBUTION OF COMPUTATION TO THE ART OF CREATION

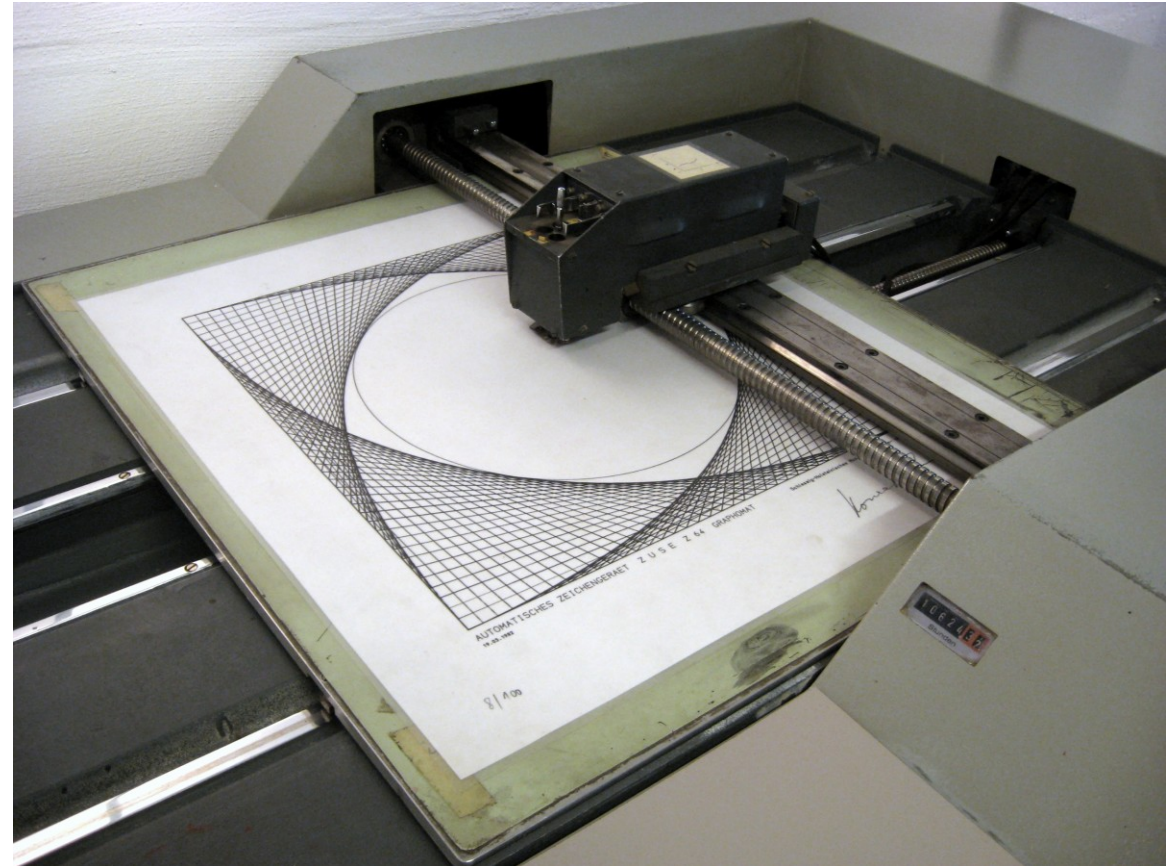
Professor John Cowan
of the Department of Psychology, Neuroscience Institute
UNIVERSITY OF BIRMINGHAM

Professor Lionel Rosen
American Professor of Human Genetics
at London University
AUTOMATIC MECHANICAL SELF-REPLICATION

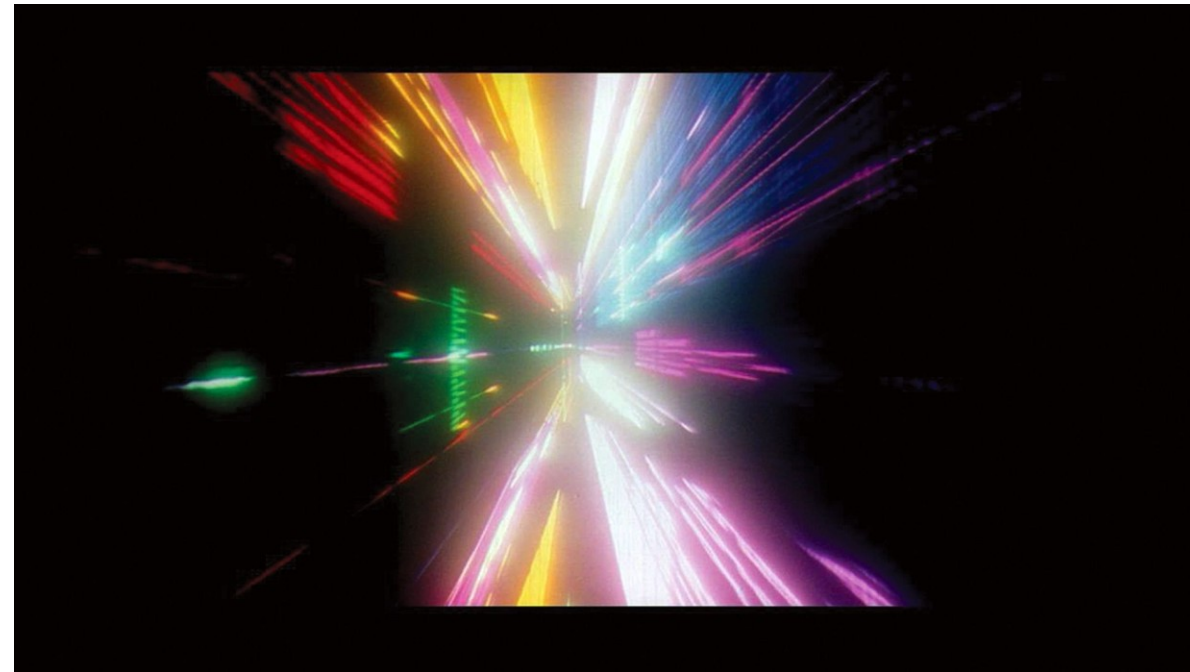
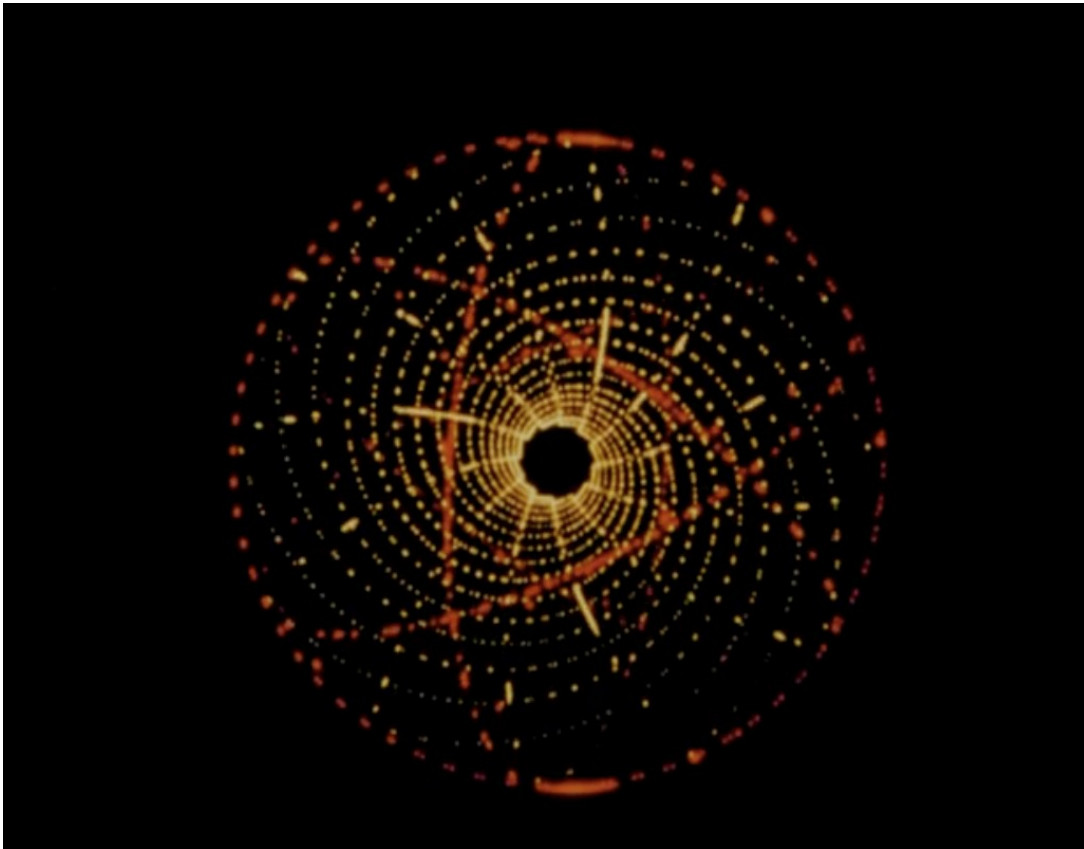
Robin Murray Wood
Computer system designer and electronic investigator
at the Cambridge Language Research Unit
TRAILING TO SUNDAY

<http://www.medienkunstnetz.de/exhibitions/serendipity/>

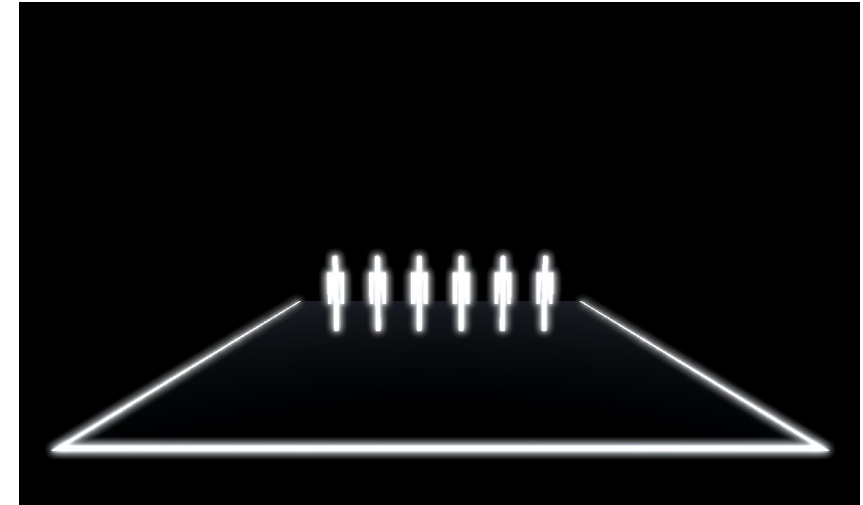
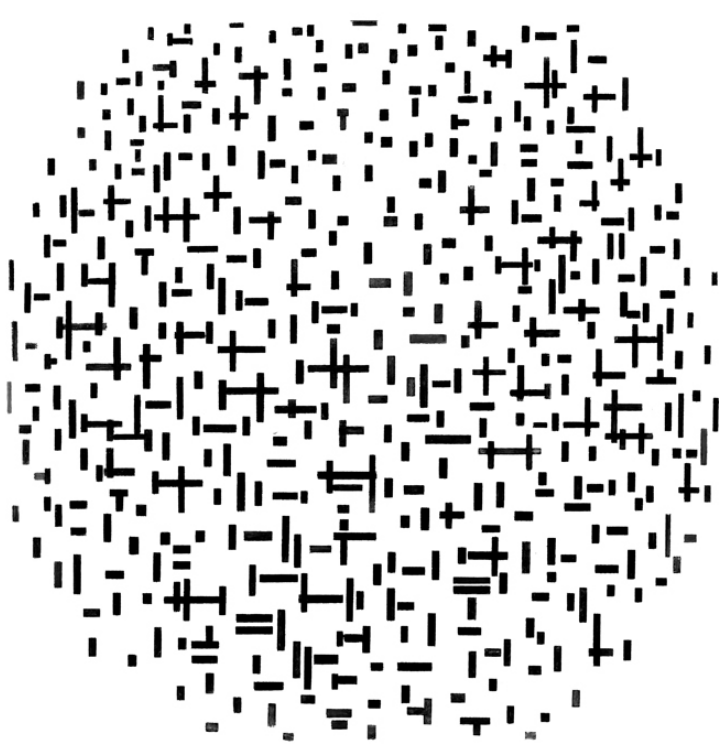
COMPUTER ART - DÍLA



PŘEDCHŮDCE - JORDAN BELSON – ALLURES (1961)



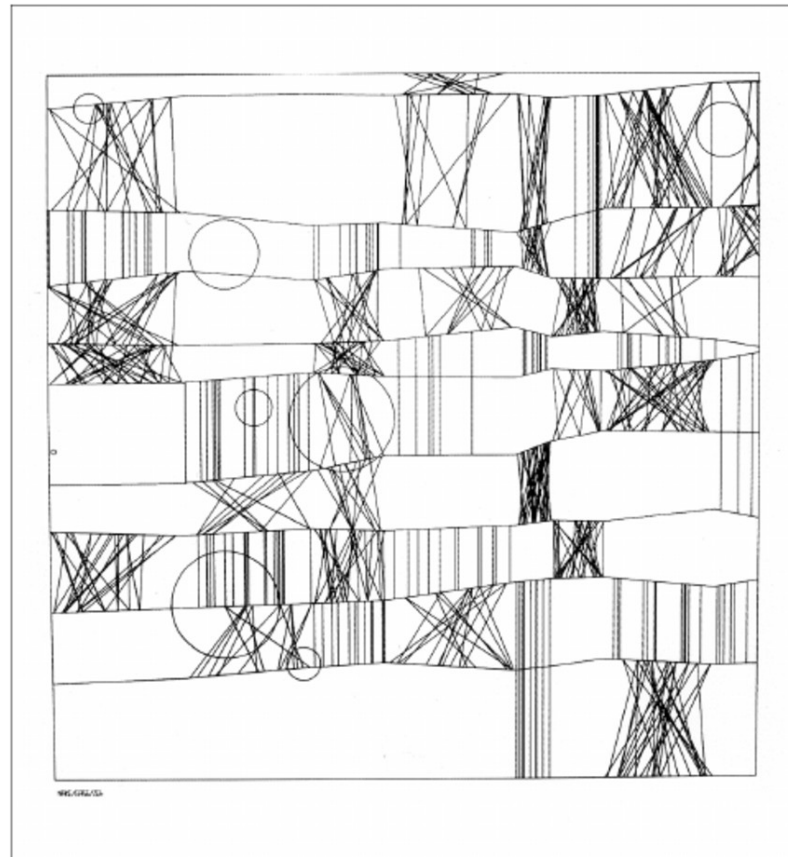
MICHAEL NOLL



Computer Composition with Lines (1964)
Ballet (1965)

Computer Generated

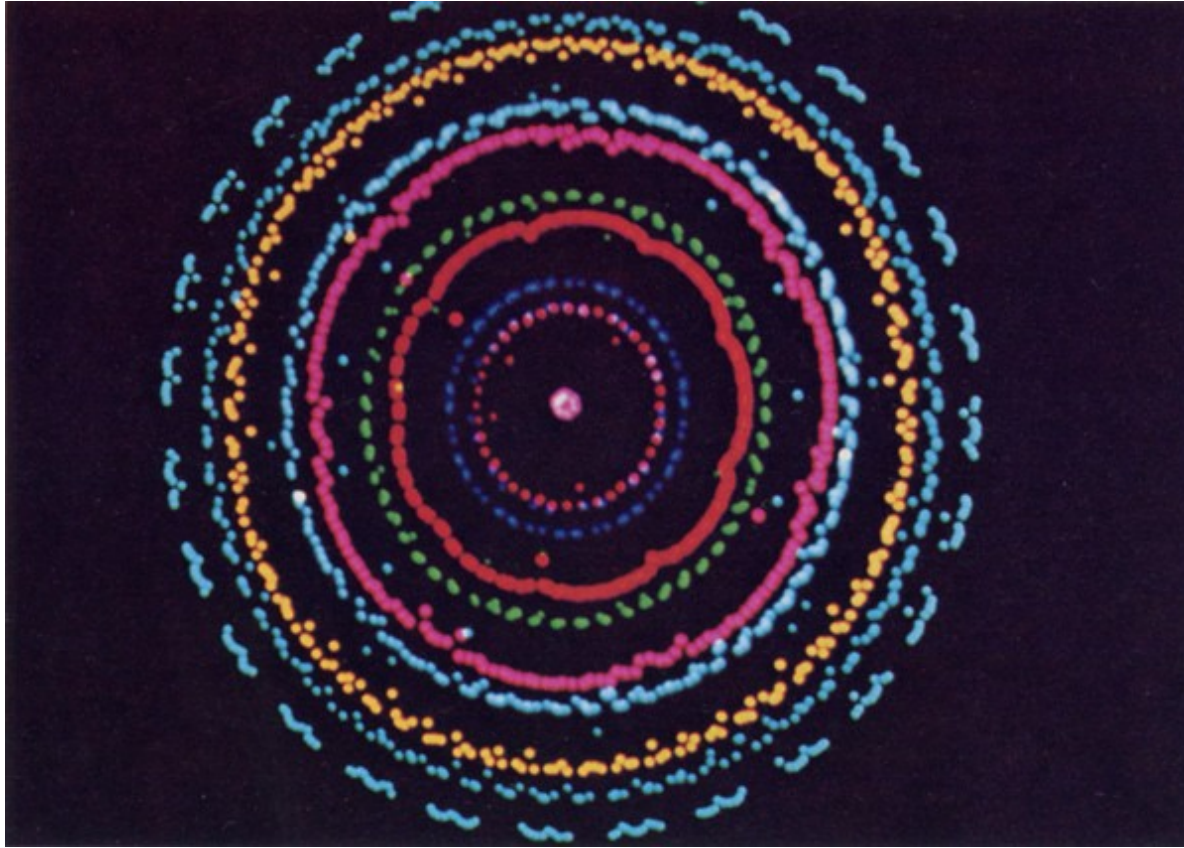
FRIEDER NAKE



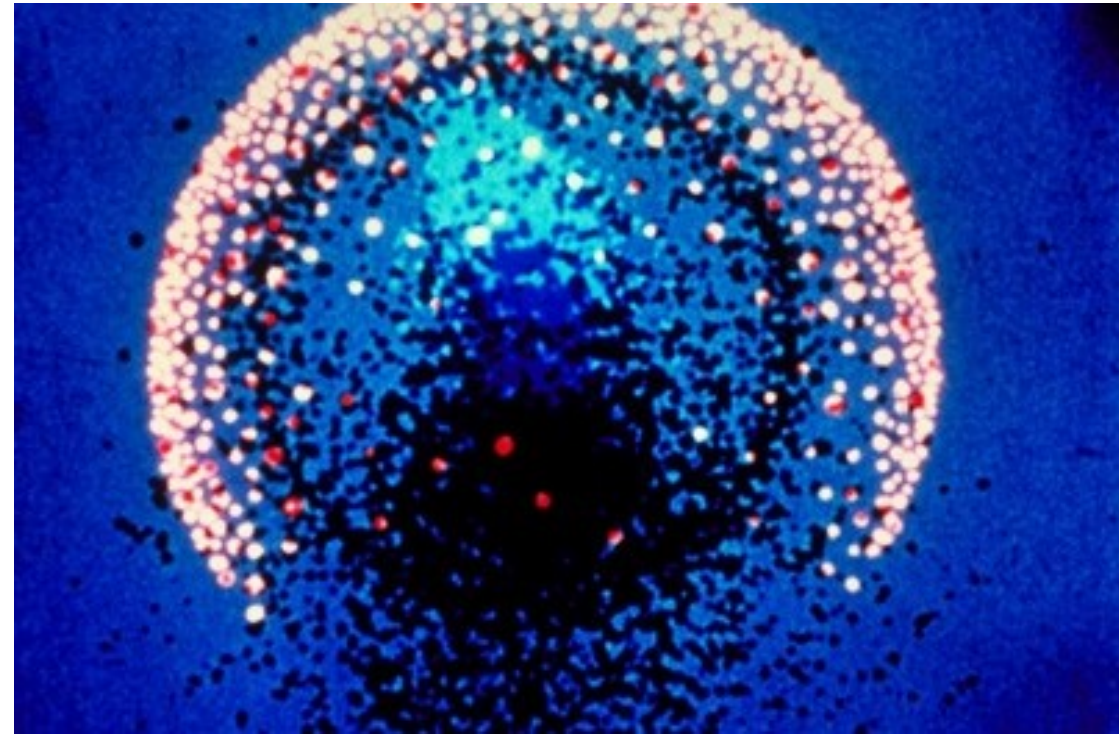
Paul Klee -Highroads and Byroads (1929) Hommage à Paul Klee 13/9/65 Nr.2
(1965)

Random Polygons

JOHN A JAMES WHITNEY



Permutations (1968)



Yantra (1957)

CHARLES CSURI: HUMMINGBIRD 1967



HAROLD COHEN - AARON (1973)



<http://www.aaronshome.com/aaron/index.html>

ERWIN DRIESSENS A MARIA VERSTAPPEN: E-VOLVER (2006)



BEN GROSSER: COMPUTERS WATCHING MOVIES (2013)

