

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

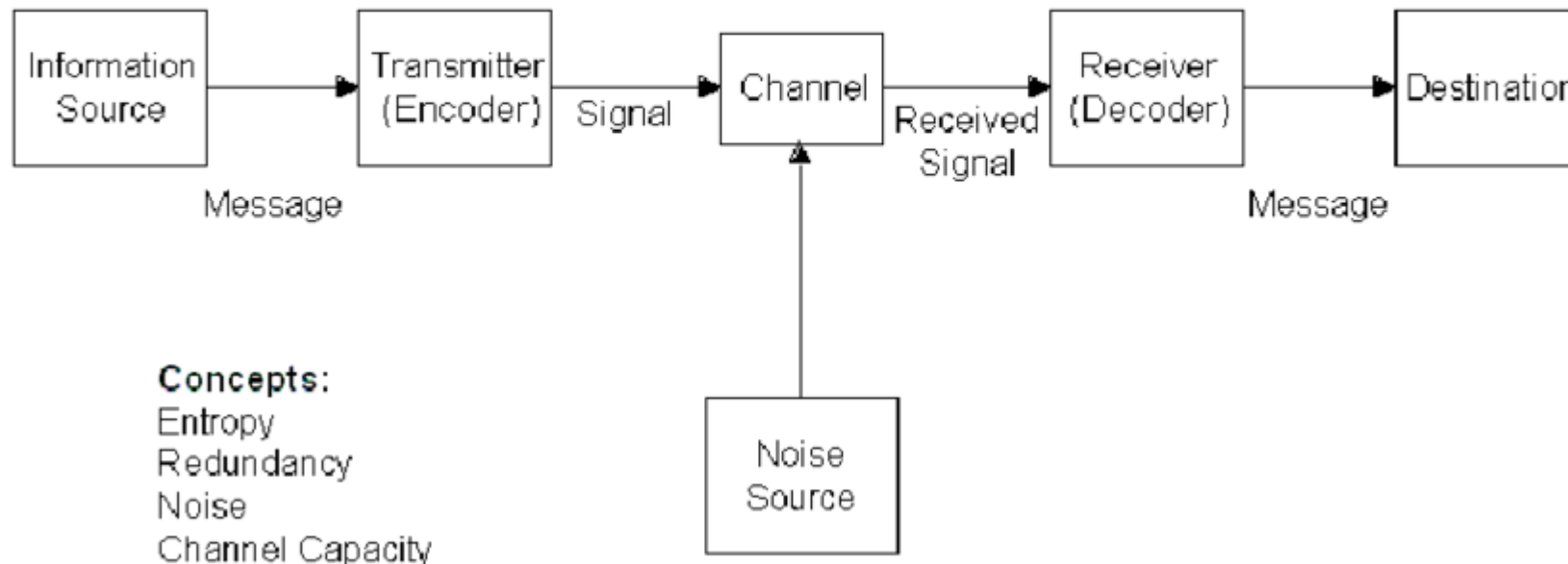
myšlenky univerzálního matematického jazyka, s nímž lze popsat svět (Leibnitz, Babbage, Turing)

Informace jako klíčový koncept prostřednictvím kterého porozumíme estetickým procesům

umělecké dílo začalo být nahlíženo optikou nové vědecké disciplíny - kybernetiky

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
works of art, sculpture and
other
serendipitous
manifestations

Institute
of Contemporary
Arts
August 2 - October 20

Institute of Contemporary Arts
North House, The Mall, London WC1N 6AH
August 2 - October 20
Tuesday, Thursday, Saturday 12 - 6

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

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

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

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

S.J. Thorne
Subdirector at Copenhagen School
New musical systems by electronic means
MUSIC: WITHOUT LABELS

Dr. Christoffer Svane
Electronic research Fellow
in the Division of Computer Science
at the National Physical Laboratory
SLEEPING AND AWAKING

Dr. Martin
Musician, theoretician, broadcaster and consultant.
In making a study of the impact of the computer
on society.
MUSIC: WITHOUT LABELS

Professor M.B. Dainton
of the Department of Aeronautical Engineering
Queen Mary College, London.
MUSIC: WITHOUT LABELS

Dr. Gordon East
Experimental psychologist and automation
Director of Research at British Research Council,
COMMITTEE ON SEX AND INDICATION

Janis Rowland
Composer, 1968 prize winner of the BBC
computer-composed music competition 1968
COMPOSITIONS: CONTRASTS IN MUSIC AND VISUALIZATION

Prof. A.S. Miller
Professor in the area of epistemology
in the Department of Philosophy and Social Sciences in general
THE COMPUTER AS AN AID TO LINGUISTIC THEORY

Francis Ouseley
Composer and Fellow of the
British Academy, University of Exeter
THE COMPUTER IN MUSIC

Professor Alexander Rice
of Technology, University of London
involved with the application of computer
and information theory to music and music
THE TECHNICAL 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 Laurel Rouse
American Professor of Human Genetics
at Stanford University
AUTOMATIC MECHANICAL SELF-REPLICATION

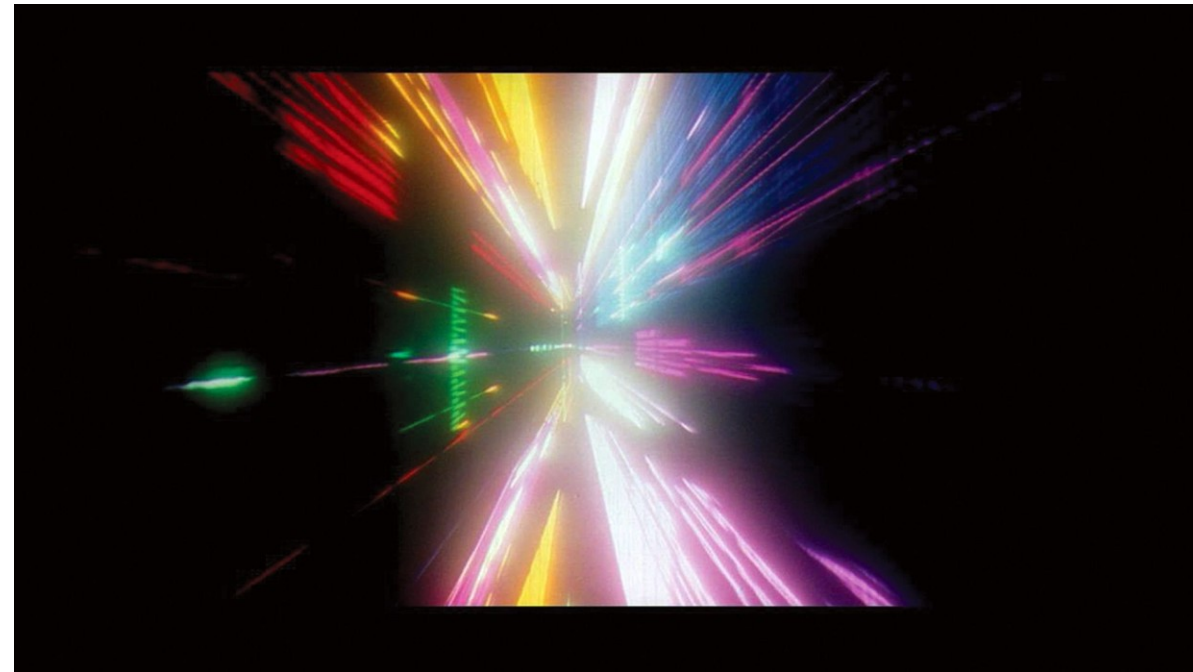
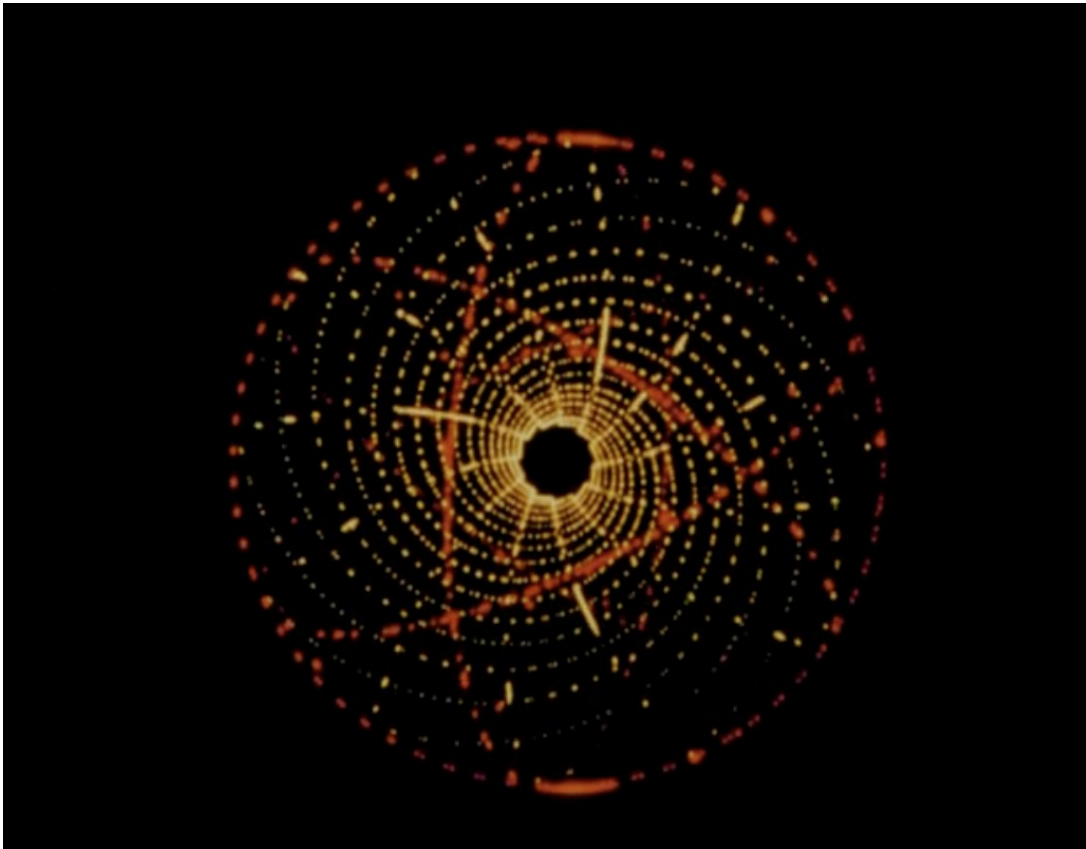
Robin Murray Wood
Computer system designer and electronic technologist
at the Cambridge Language Research Unit
TRAILING TO SUBMERGENCE

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

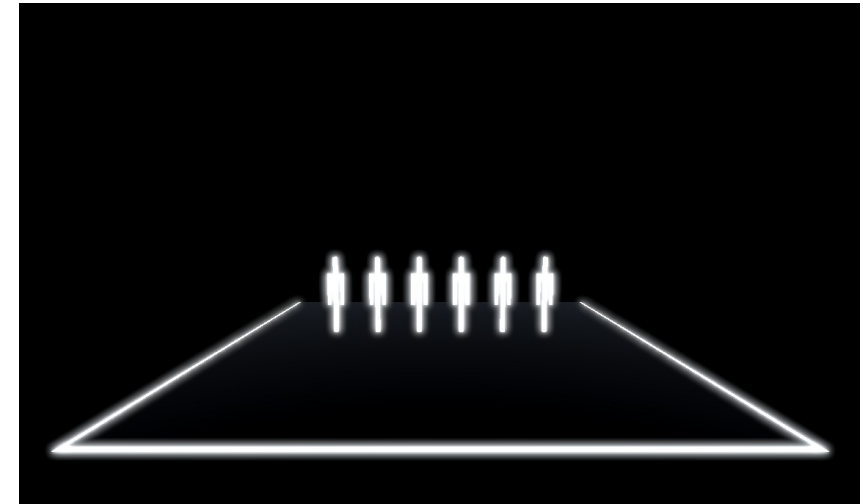
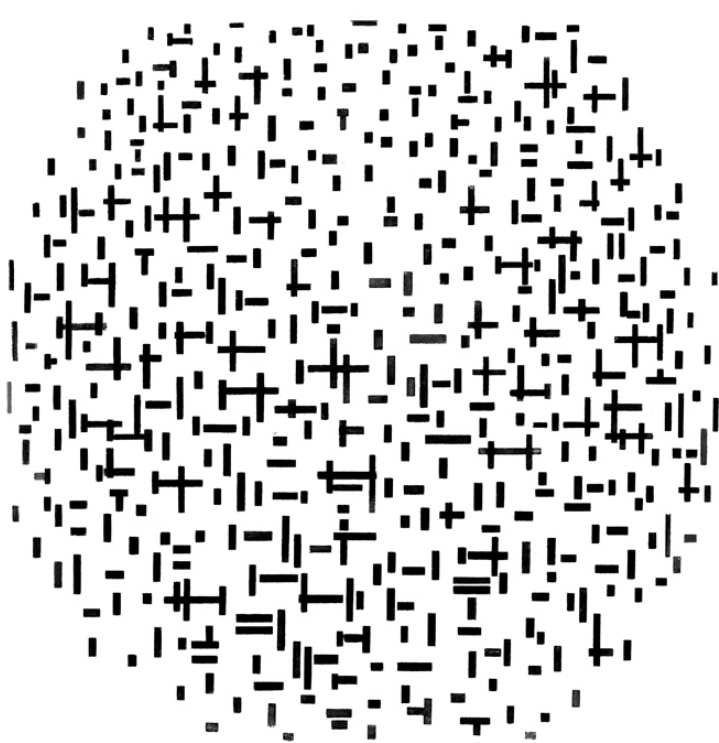
COMPUTER ART - DÍLA



PŘEDCHŮDCE - JORDAN BELSON – ALLURES (1961)



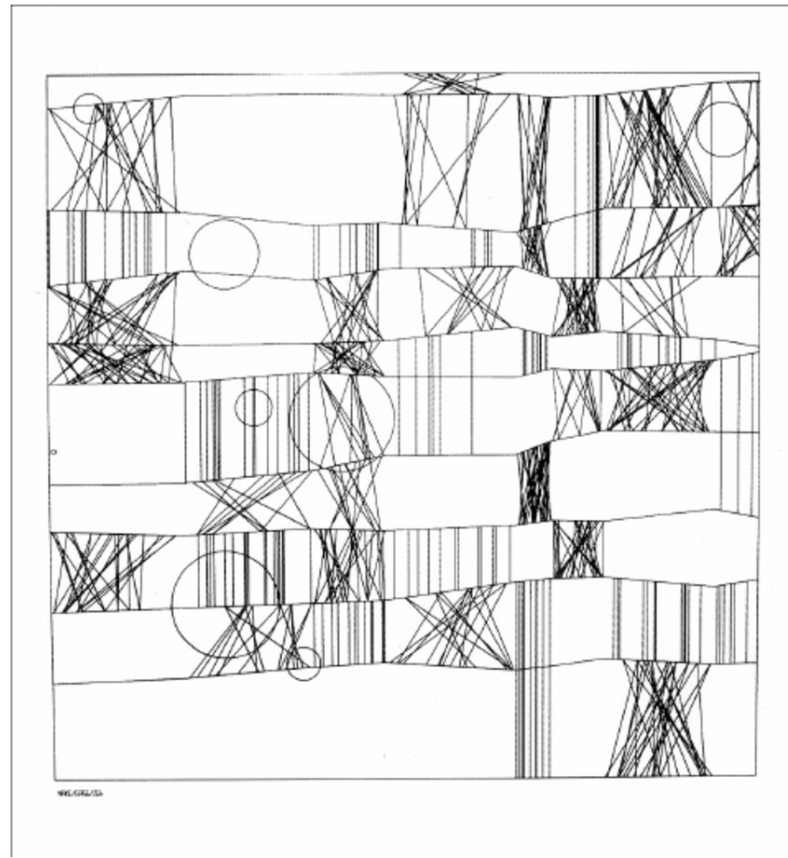
MICHAEL NOLL



Computer Composition with Lines (1964)
Ballet (1965) <http://noll.uscannenberg.org/Art%20Papers/Mondrian.pdf>

Computer Generated

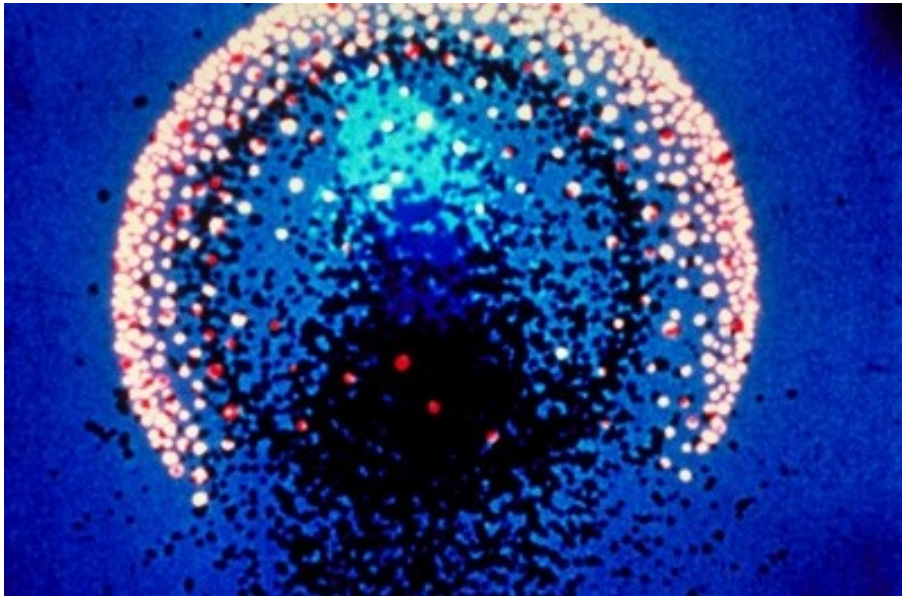
FRIEDER NAKE



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

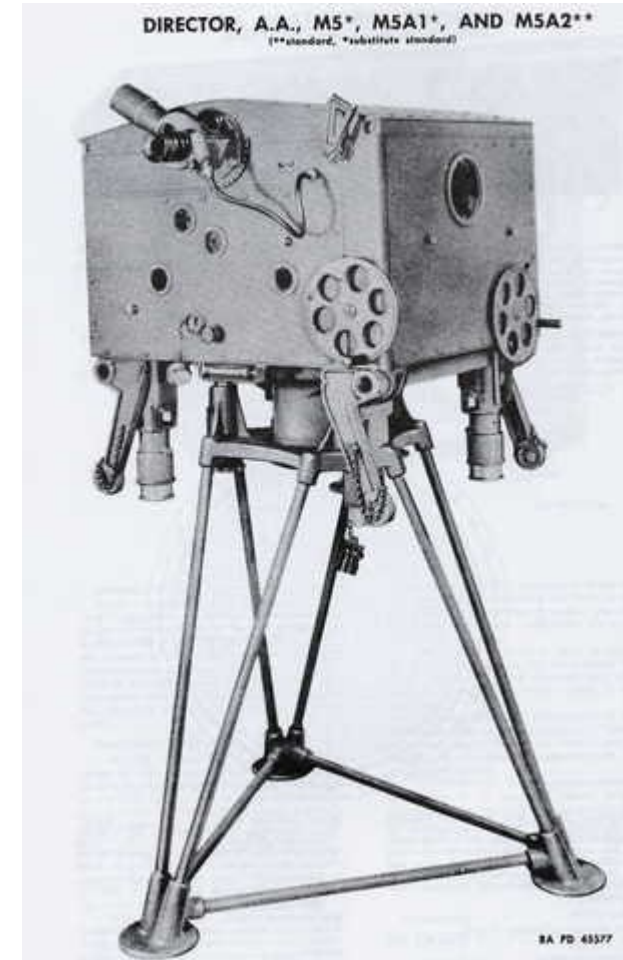
Random Polygons

JOHN A JAMES WHITNEY

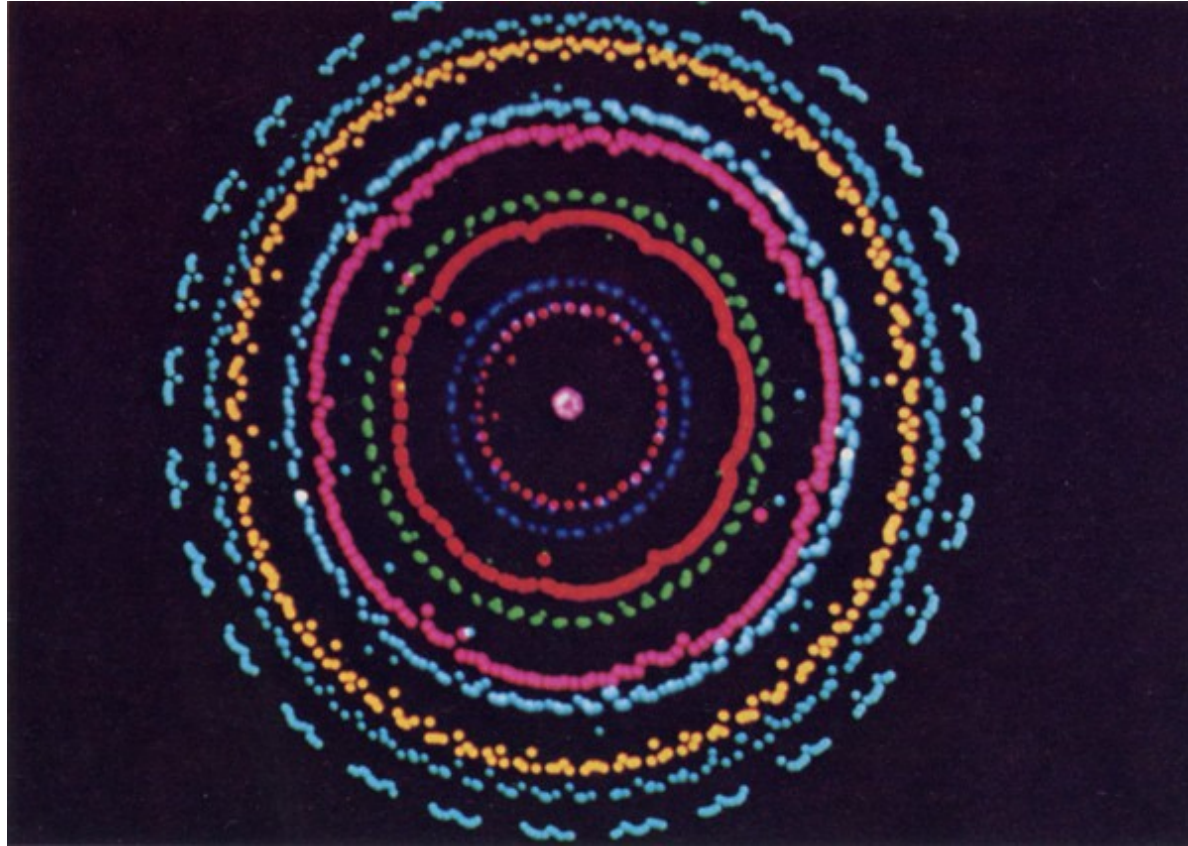


Yantra (1957)

<http://www.centerforvisualmusic.org/WhitneyNotesPerm.htm>



JOHN A JAMES WHITNEY



Permutations (1968)

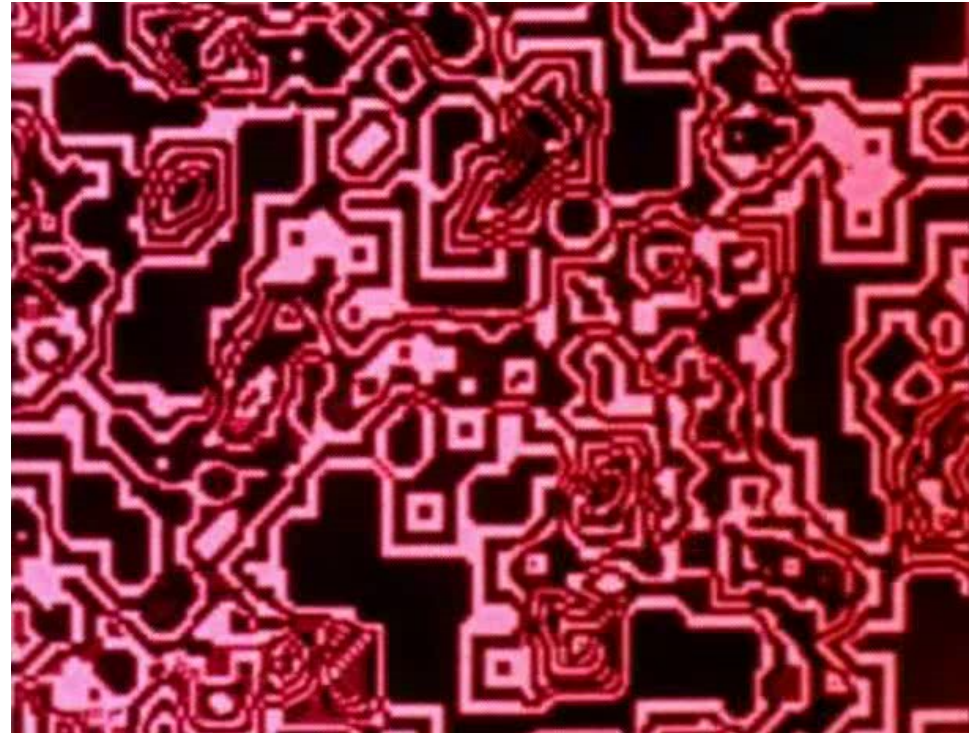
[p://www.centerforvisualmusic.org/WhitneyNotesPerm.htm](http://www.centerforvisualmusic.org/WhitneyNotesPerm.htm)

CHARLES CSURI: HUMMINGBIRD 1967



<https://www.moma.org/calendar/exhibitions/3903>

LILLIAN F. SCHWARTZ



<http://lillian.com/1970-pixillation-4-min/>

<http://lillian.com/art-analysis/>

HAROLD COHEN - AARON (1973)

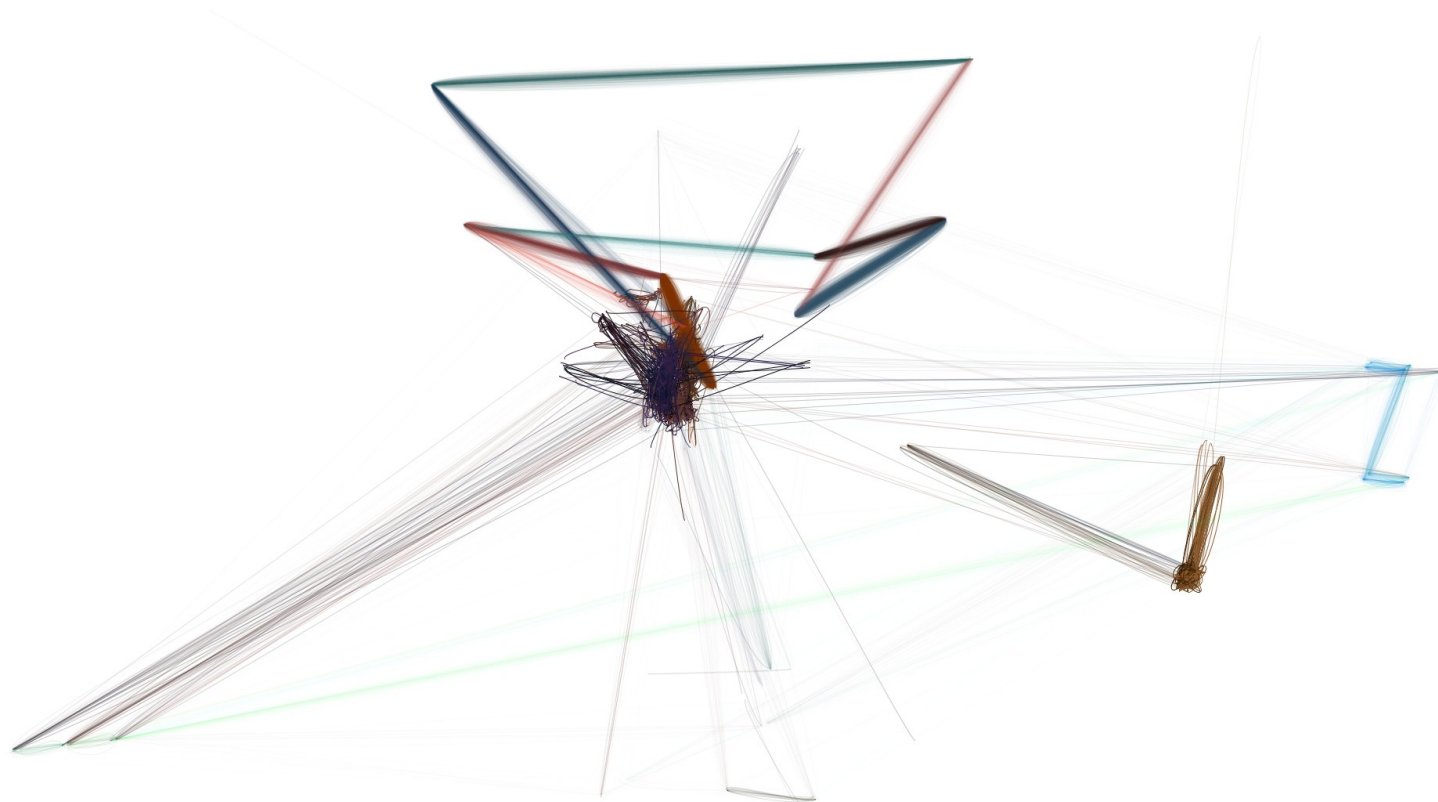


<http://www.aaronshome.com/aaron/index.html>

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



BEN GROSSER: COMPUTERS WATCHING MOVIES (2013)



GENERATIVNÍ UMĚNÍ - APLIKACE

<http://weavesilk.com>

<https://tinkersynth.com/slopes>

<https://www.prosepainter.com>

ZDROJE

[What is Computer Art? An Attempt Towards an Answer and Examples of Interpretation. MediaArtNet, 2004.](#)

Ondřej Chrobák - Pavel Kappel - Jana Písaříková. 1968: computer.art. Brno: Moravská galerie v Brně, 2018.

Frank Dietrich. Visual Intelligence: The First Decade of Computer Art (1965-1975). Leonardo, roč. 19, č. 2, 1986.

<http://dada.compart-bremen.de/>