

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

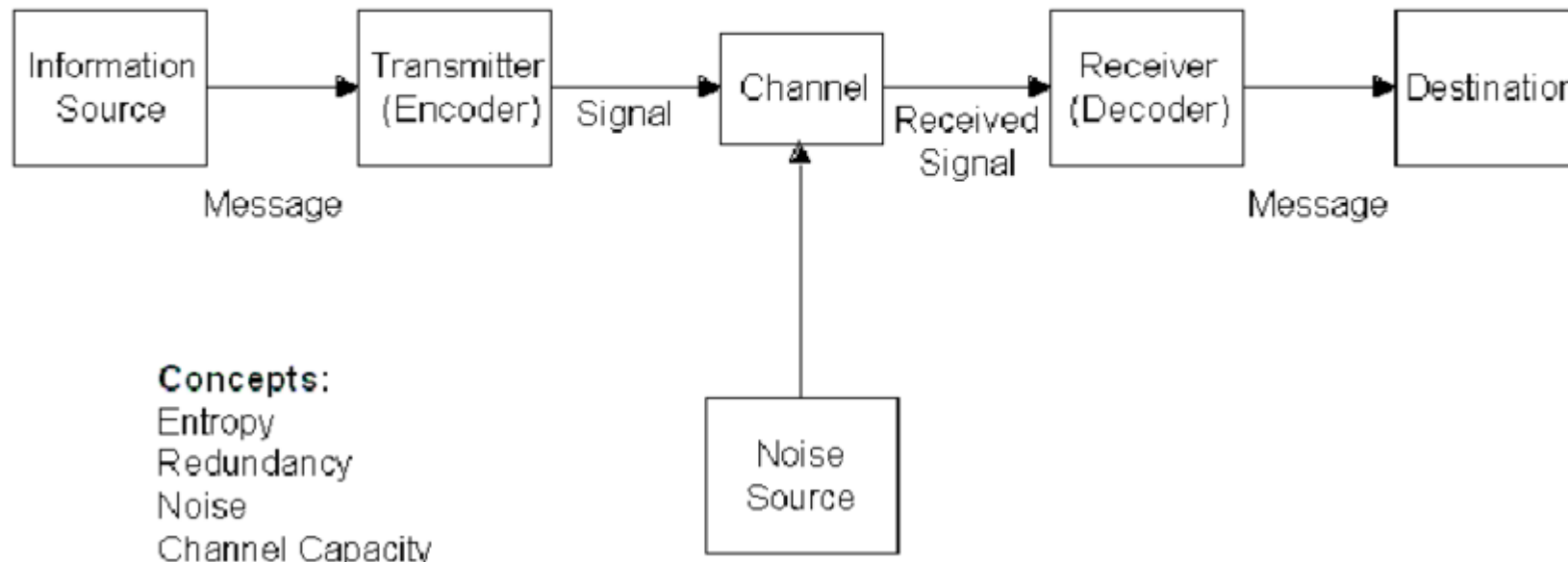
myšlenky univerzálního matematického jazyka, s nímž lze popsat svět
(Leibnitz, Babbage, Turing)

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 uses
and 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, scientific and
other
serendipitous
manifestations

Institute
of Contemporary
Arts
August 2 - October 20

Institute of Contemporary Arts
North House, The Mall, London WC1N
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

August 2 - October 20, 1968
During the course
of the Electronic Serendipity exhibition
at North House, The Mall, London W.C.1
a series of lectures will be held
Monday - 10.30
304 members - 5/6
or by application - member ticket - 4/3

Class 3. Miller
Music in the Field of Serendipity,
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.
COMPOSING WITH AUTOMATIC MUSIC

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

R.D. Thomas
Sub-director at Government School
New machine systems for literary creation
AND HIS MARTIN ROBERTSON

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

Mr. Colin
Writer, Journalist, Broadcaster and consultant,
in making a study of the impact of the computer
ON WRITING
SOURCES IN THE SERVICE OF MAN

Professor M.D. Young
of the Department of Aeronautical Engineering
Queen Mary College, London.
SOURCES IN THE SERVICE OF MAN

Dr. Gordon East
Experimental psychologist and automation
DIRECTOR OF RESEARCH IN ARTS RESEARCH CENTER,
CONCORD ON SEX AND INDUSTRY

Janis Rowland
Composer, 1968 artist winner of the BBC Congress
computer-composed music competition 1968
UNUSUAL CONTRAST IN MUSIC AND VISUALIZATION

Mr. A. S. Miller
Professor in the area of computer
in the Department of Applied Science and
THE COMPUTER AS AN AID TO LITERARY CREATION

Francis Oswald
Composer and Faculty of the
School of Music, University of Florence
THE COMPUTER IN MUSIC

Professor Robert Rice
of University of Toronto, serendipitous and computerized
work with the application of computer
and information theory to musicology and music
THE SERIAL 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 Cohen
of the Department of Psychology, Neuroscience Institute
UNIVERSITY OF BIRMINGHAM

Professor Laurel Resner
American Professor of Human Genetics
AT HARVARD UNIVERSITY
AUTOMATIC MECHANICAL SELF-REPLICATION

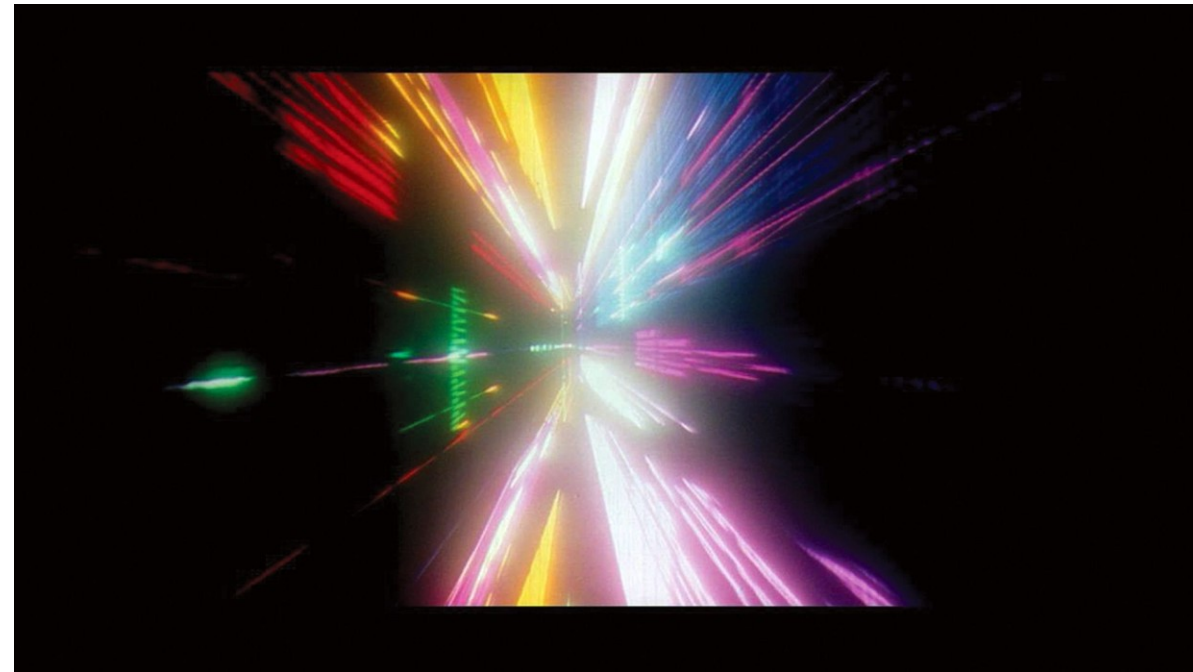
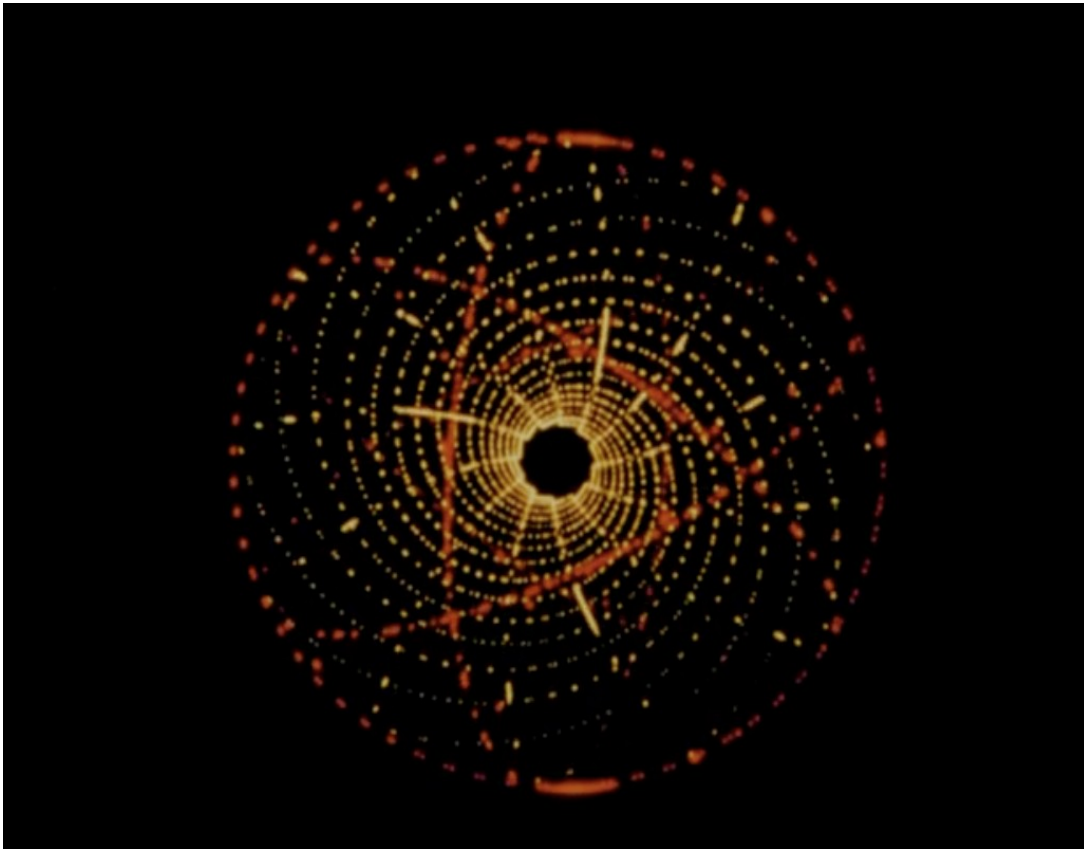
Robin Murray Wood
Computer system designer and electronic investigator
at the Cambridge Language Research Unit
TRAILING TO SERENDIPITY

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

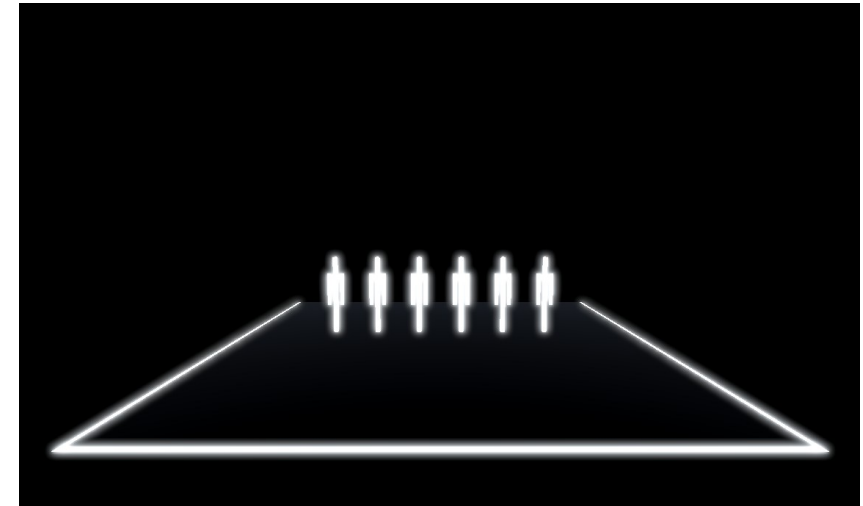
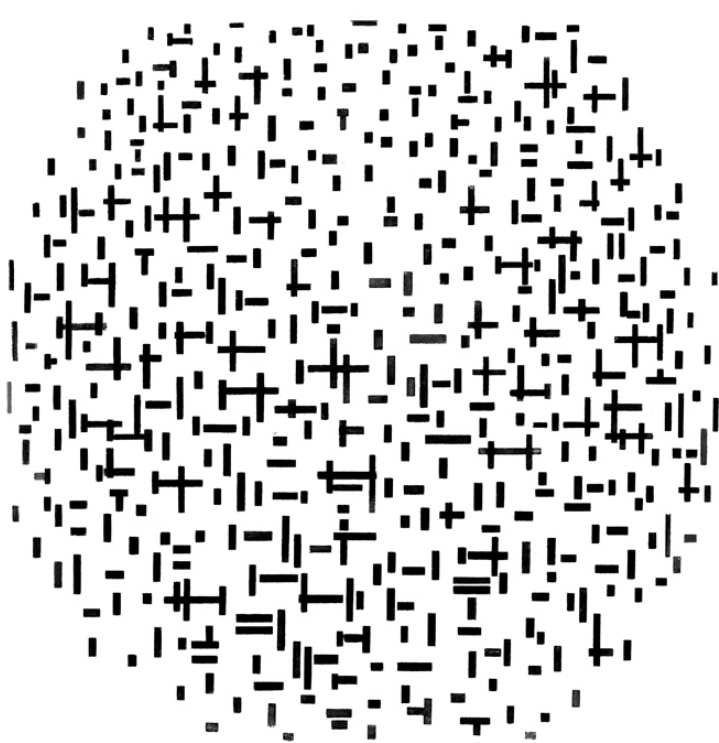
COMPUTER ART - DÍLA



PŘEDCHŮDCE - JORDAN BELSON – ALLURES (1961)



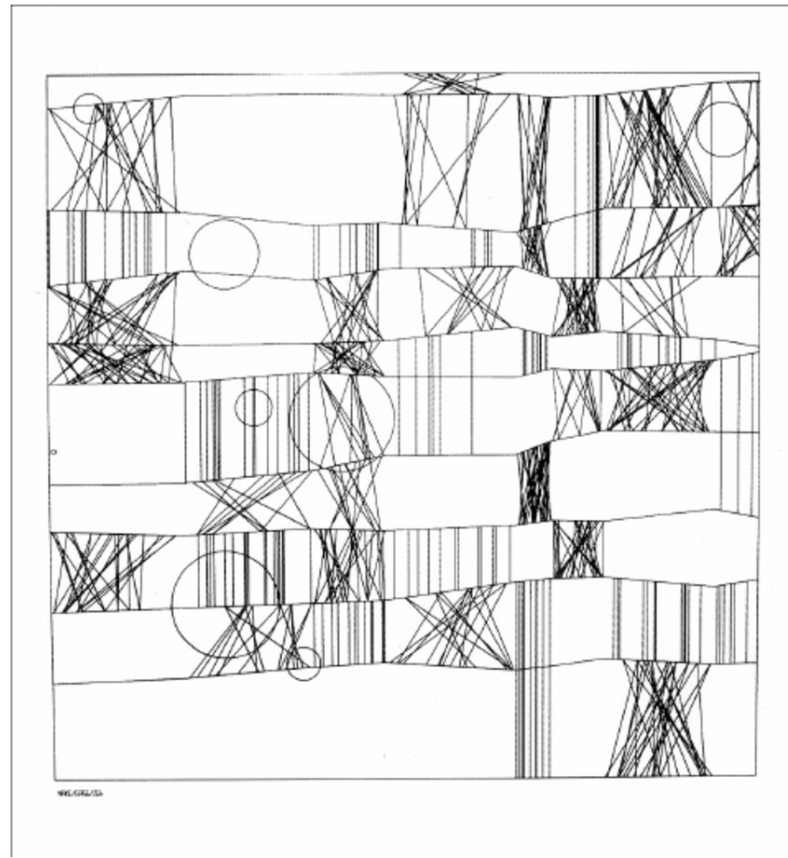
MICHAEL NOLL



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

Computer Generated

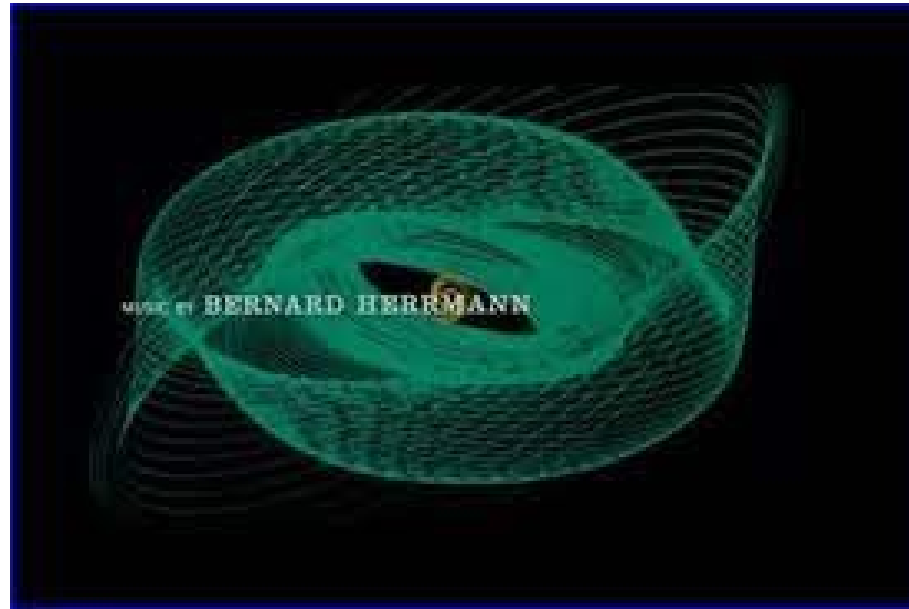
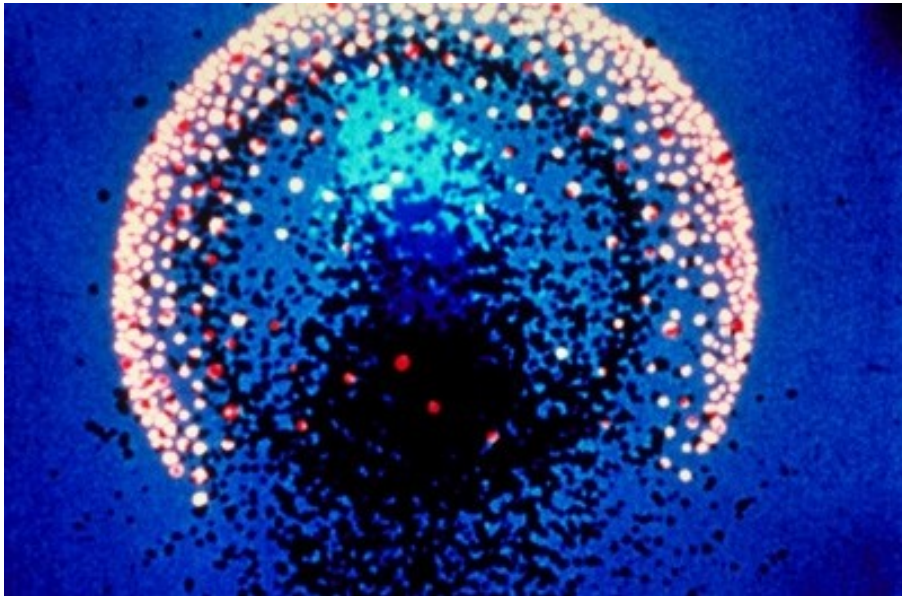
FRIEDER NAKE



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

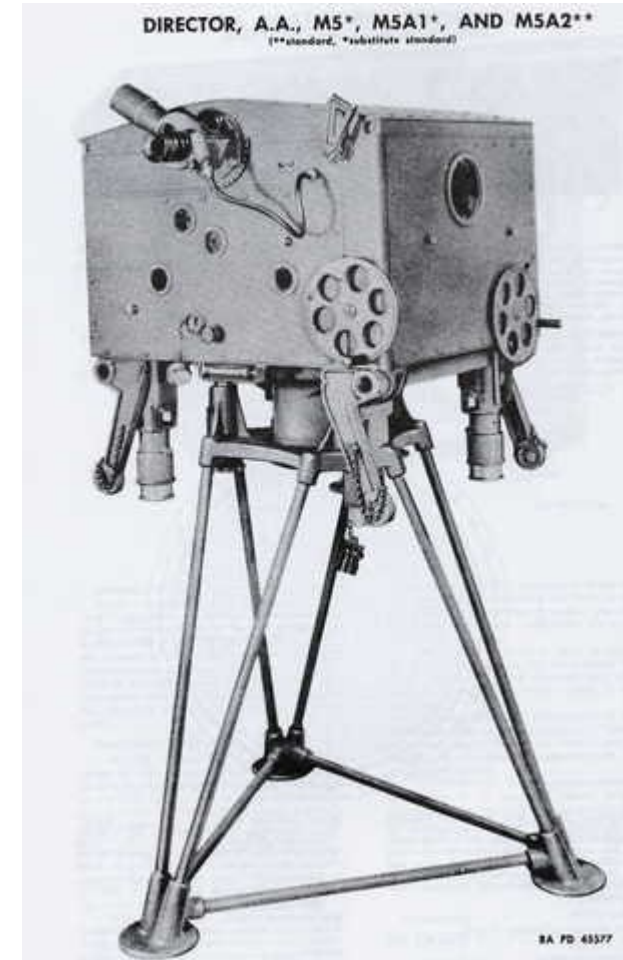
Random Polygons

JOHN A JAMES WHITNEY

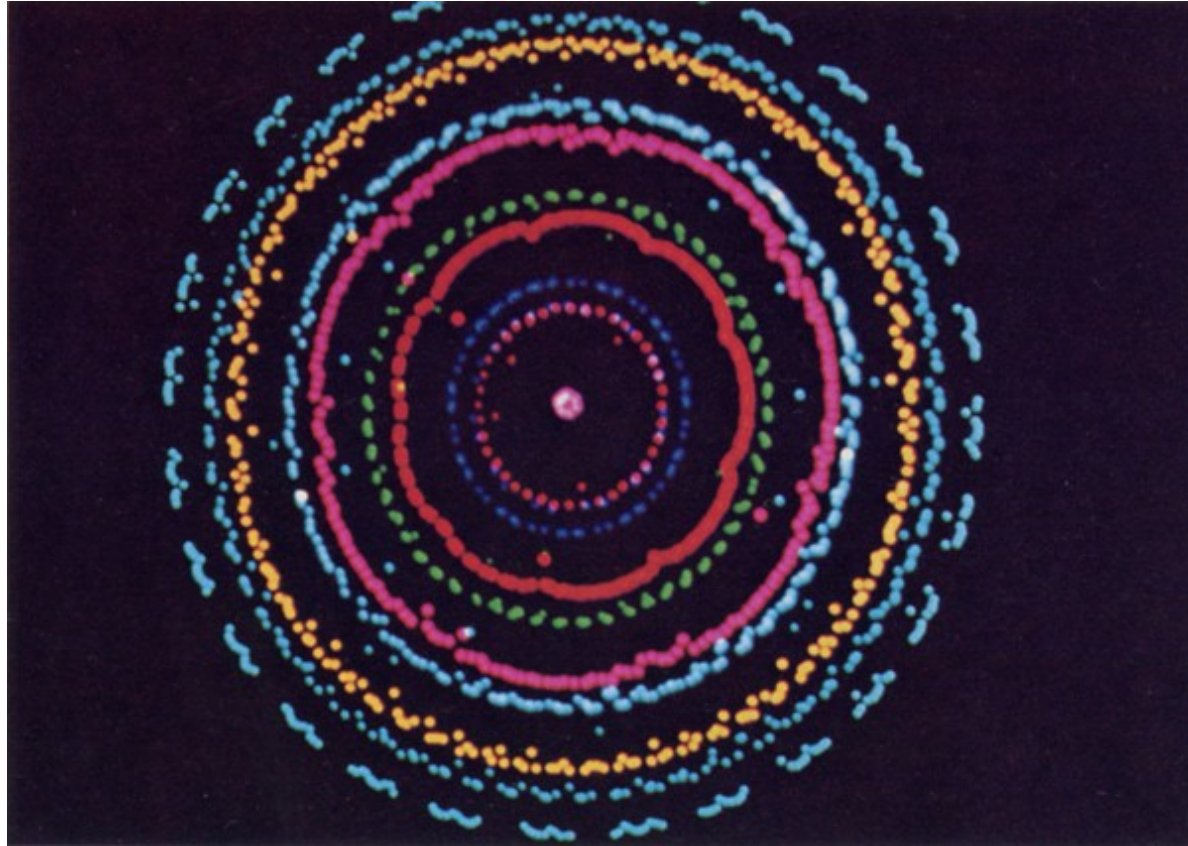


Yantra (1957)

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



JOHN A JAMES WHITNEY



Permutations (1968)

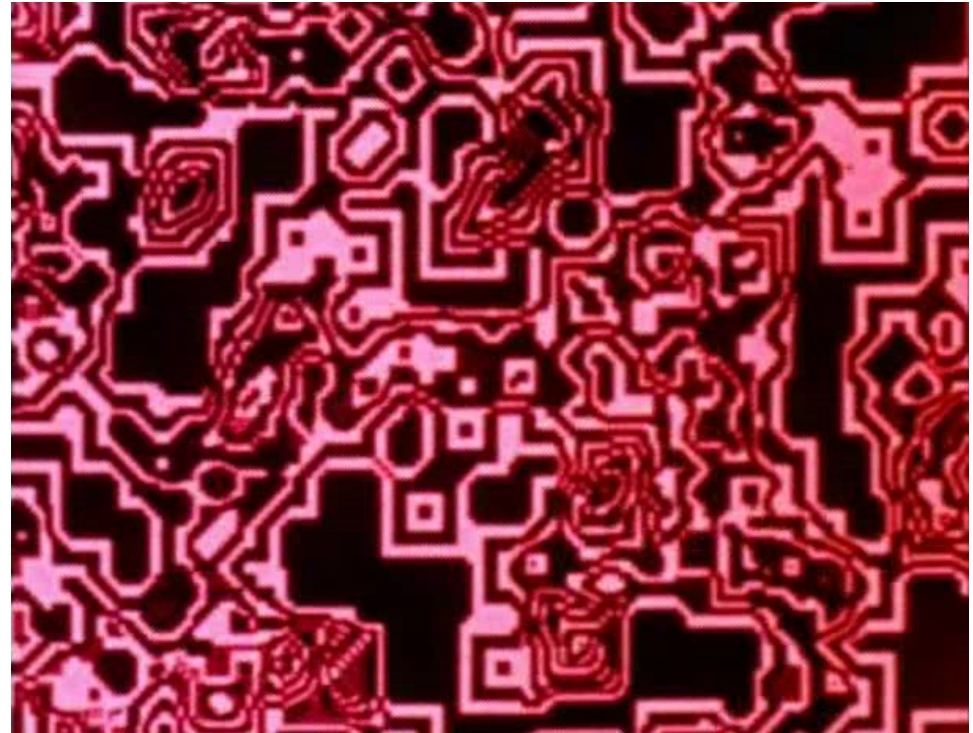
[p://www.centerforvisualmusic.org/WhitneyNotesPerm.htm](http://www.centerforvisualmusic.org/WhitneyNotesPerm.htm)

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)

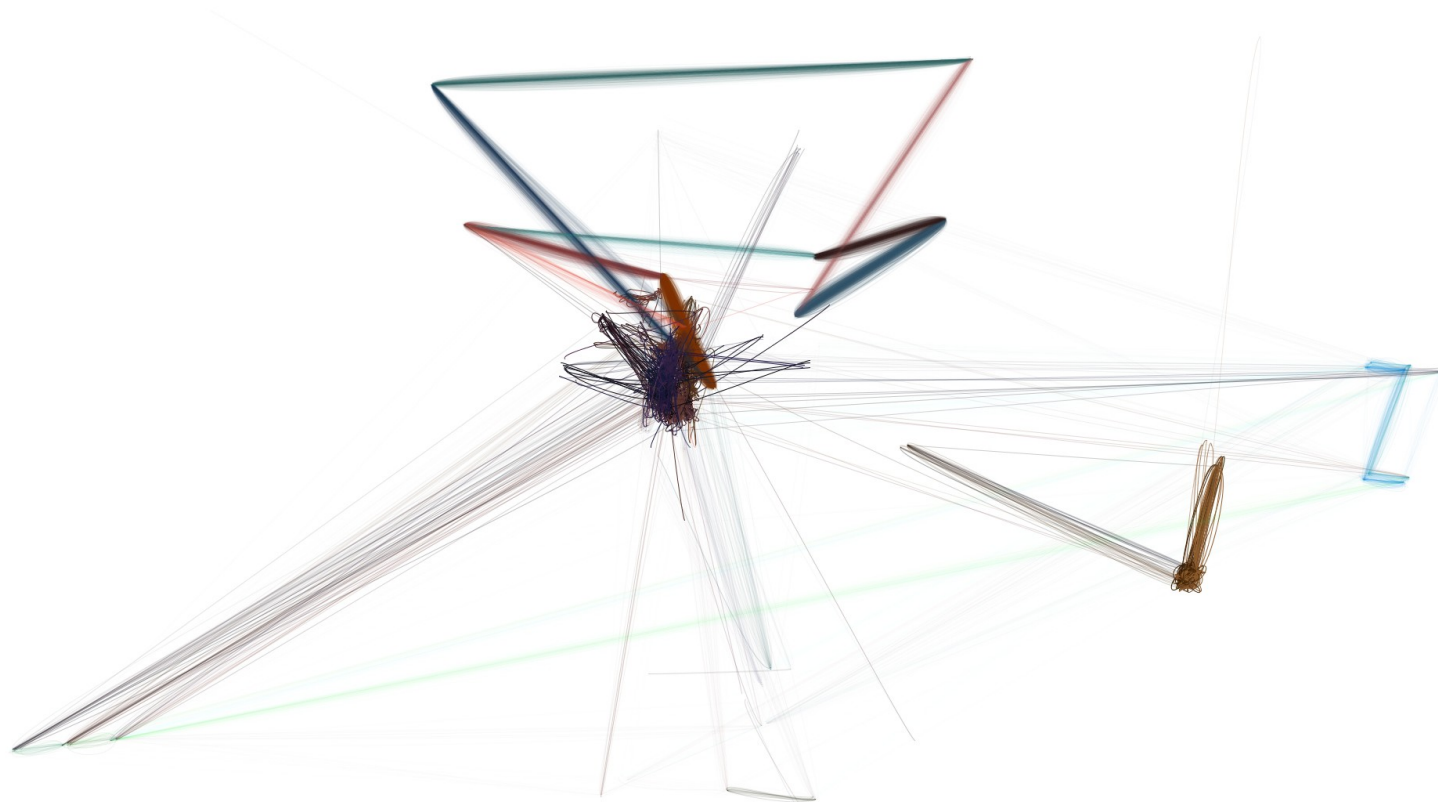


<http://www.aaronshome.com/aaron/index.html>

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/>