

GENERATIVNÍ UMĚNÍ,  
POČÍTAČOVÉ UMĚNÍ,  
ALGORITMICKÉ UMĚNÍ

# 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/>

# 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

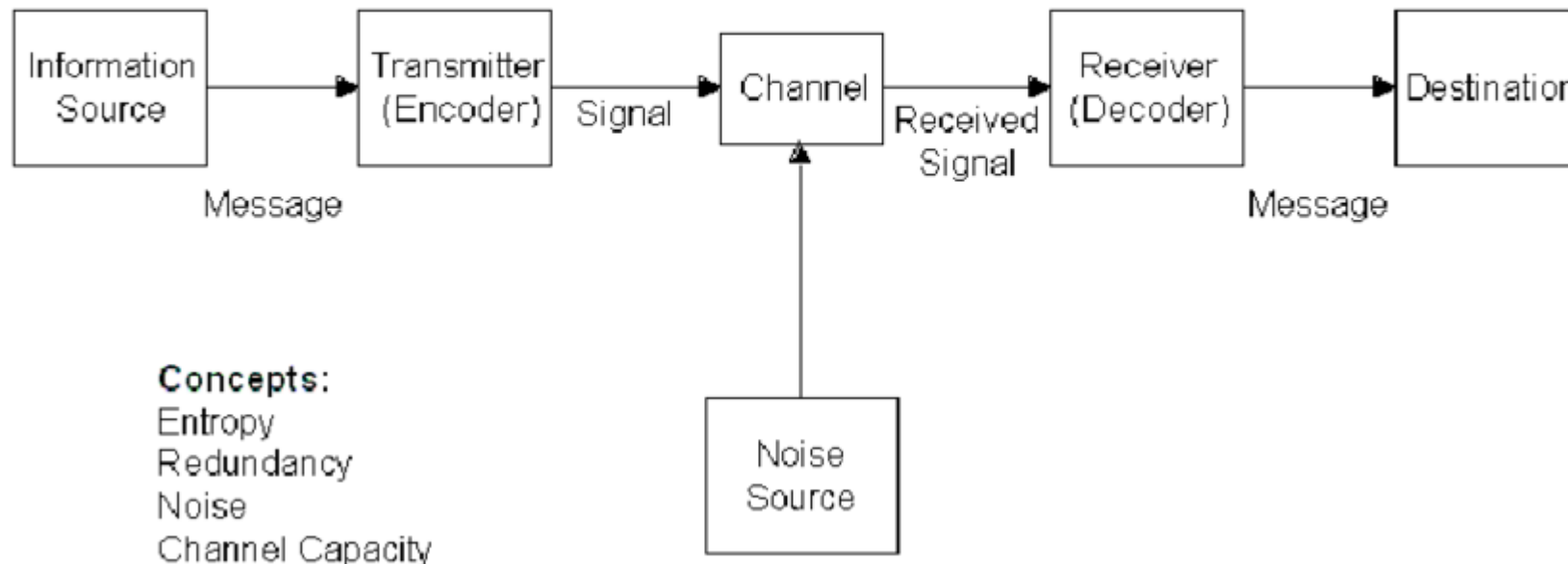
myšlenky univerzálního matematického jazyka, s nímž lze popsat svět (Leibnitz, Babbage, Turing)

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  
Serendipity

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

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  
and  
other  
serendipitous  
manifestations

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

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

Dr. J. R. Hayes  
Make in the field 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 THAT INSPIRE MUSIC

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

S.J. Thorne  
Sub-director at Cambridge School  
How machine computers in literary criticism  
AND HOW MACHIN RESEMBLE IT?

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

Dr. Martin  
Writer, dramatist, broadcaster and consultant.  
In making a study of the impact of the computer on society  
TOWARDS TO SUNDAY EVEN

Professor M.J. Duffin  
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 CENTER,  
CAMBRIDGE ON SEX AND INDICATION

Janis Rowland  
Composer, 1968 artist winner of the BBC Congress  
computer-processed music competition 1968  
UNUSUAL, CONTRASTY IN MUSIC AND ITS FORMULATION

Mr. A. S. Miller  
Plays on the use of computers  
in the dramatic, classical and folk literature in general  
THE COMPUTER AS AN AID TO LITERARY CRITICISM

Philippe Guéhen  
Composer and teacher of the  
School of Music, University of Florence  
THE COMPUTER IN MUSIC

Professor Robert Rouse  
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

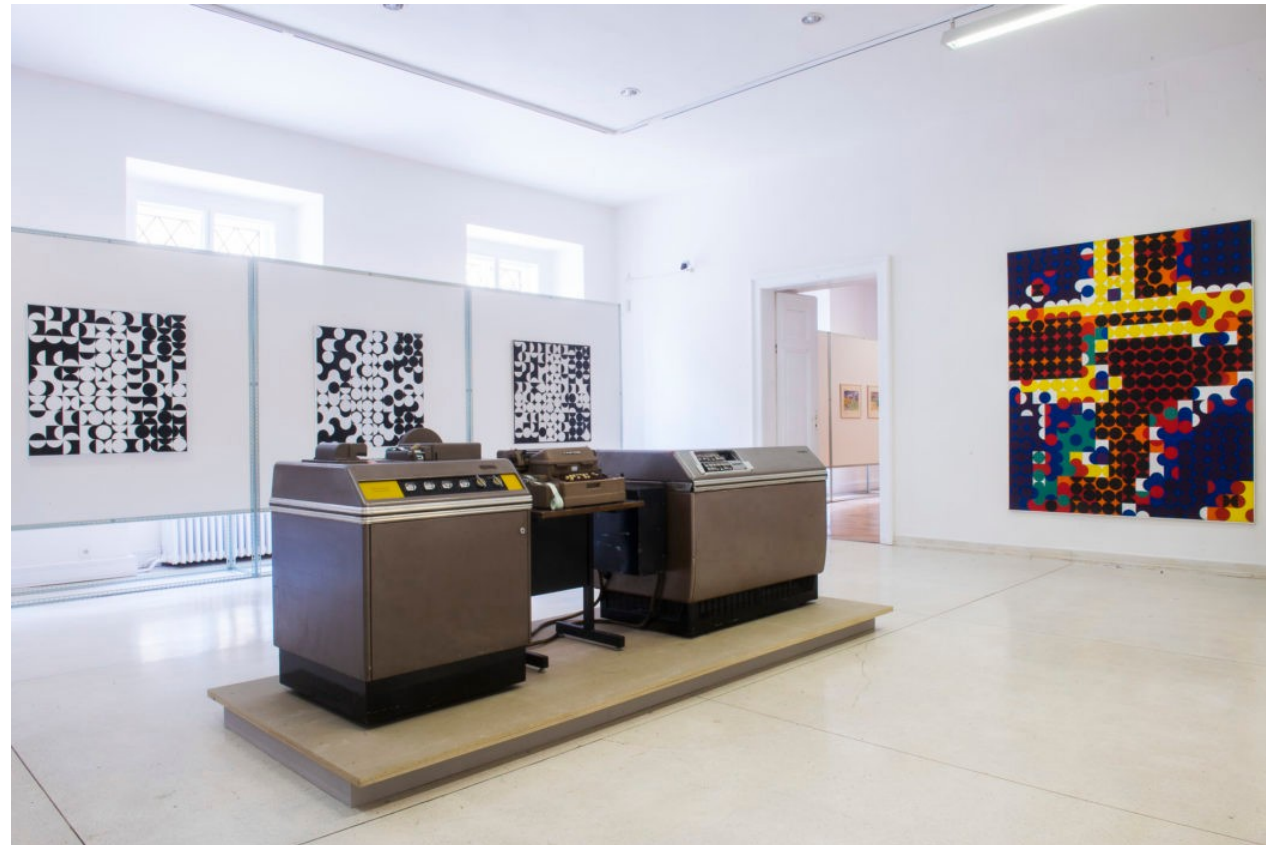
Professor Lionel Rosen  
American Professor of Human Genetics  
at London University  
AUTOMATIC MECHANICAL SELF-REPLICATION

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

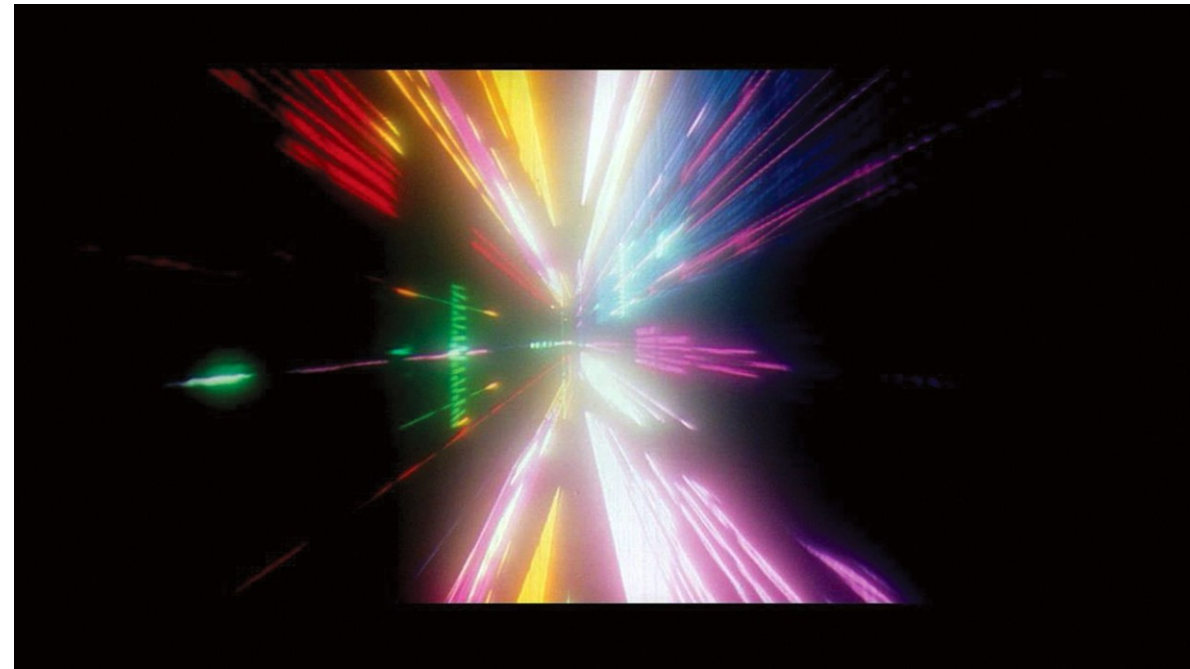
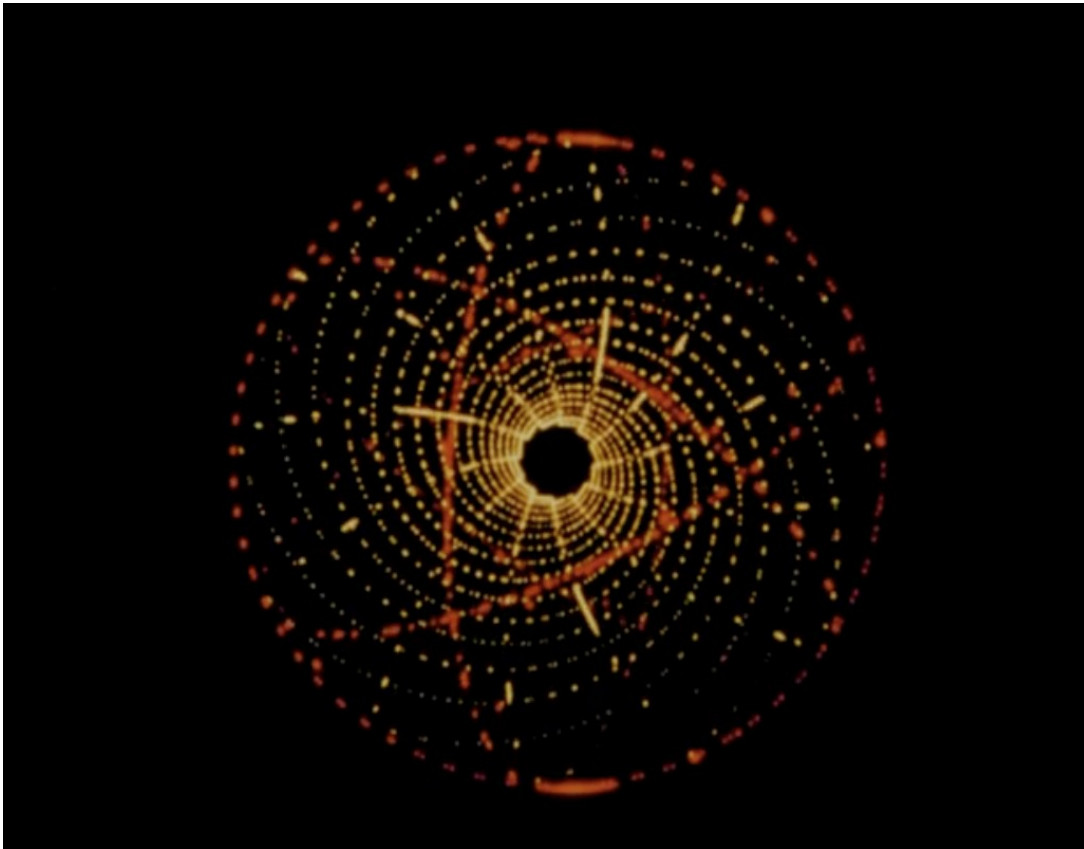
<http://www.medienkunstnetz.de/exhibitions/serendipity/>



# COMPUTER ART - DÍLA

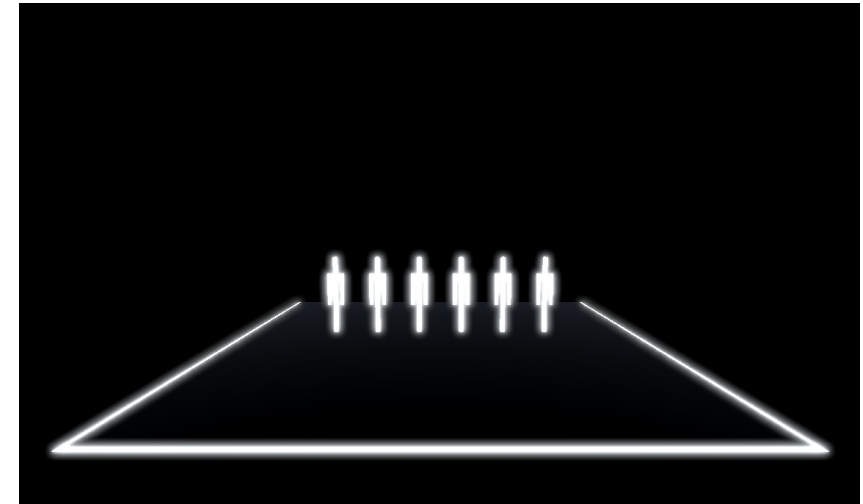
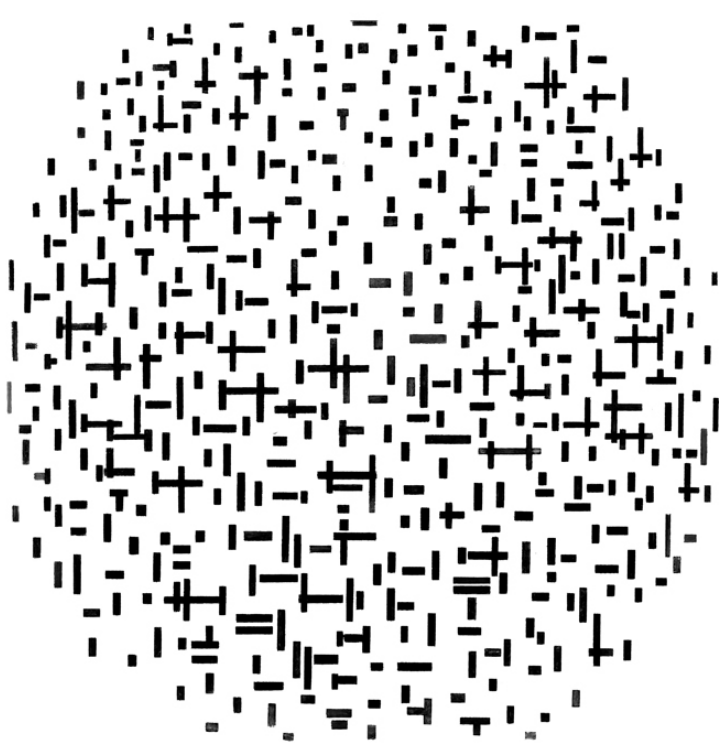


# PŘEDCHŮDCE - JORDAN BELSON – ALLURES (1961)



<https://www.pifpaf.cz/cs/bratri-john-a-james-whitneyove-projekce-ii>

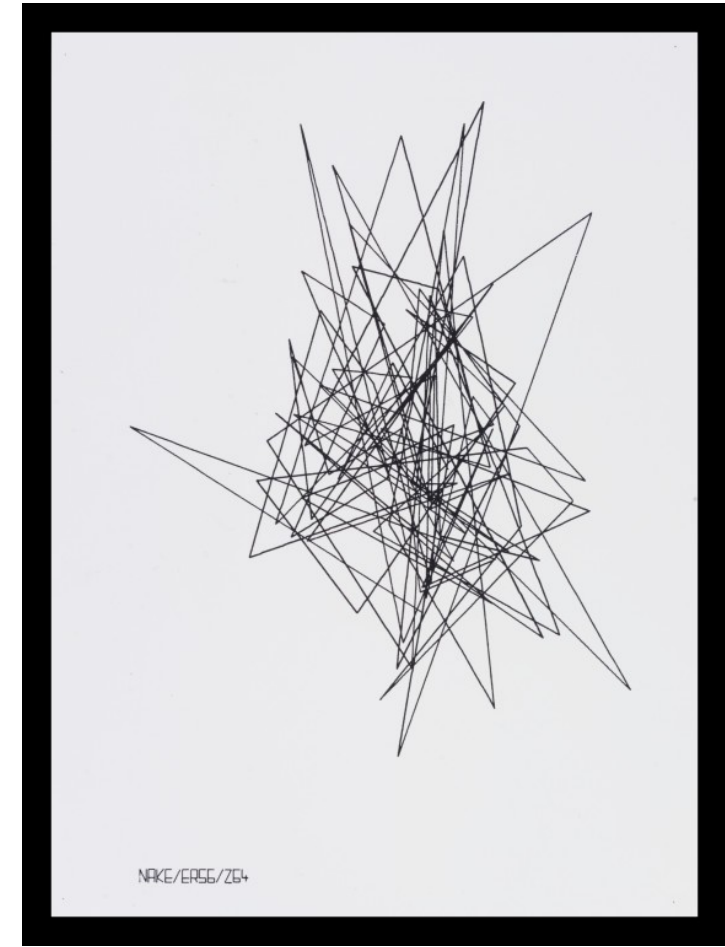
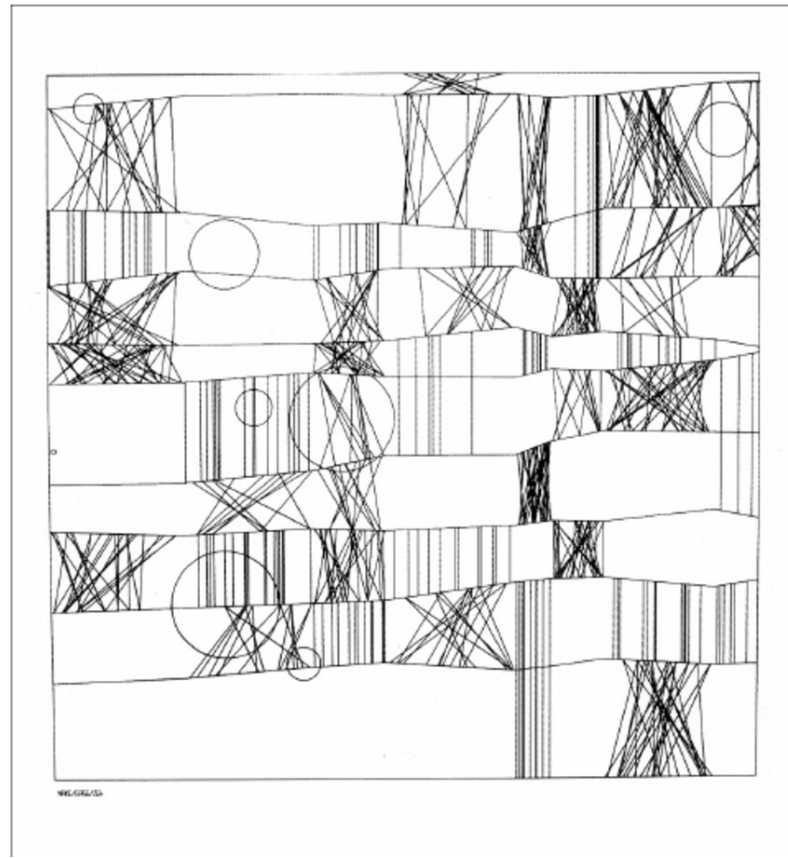
# MICHAEL NOLL



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

Computer Generated

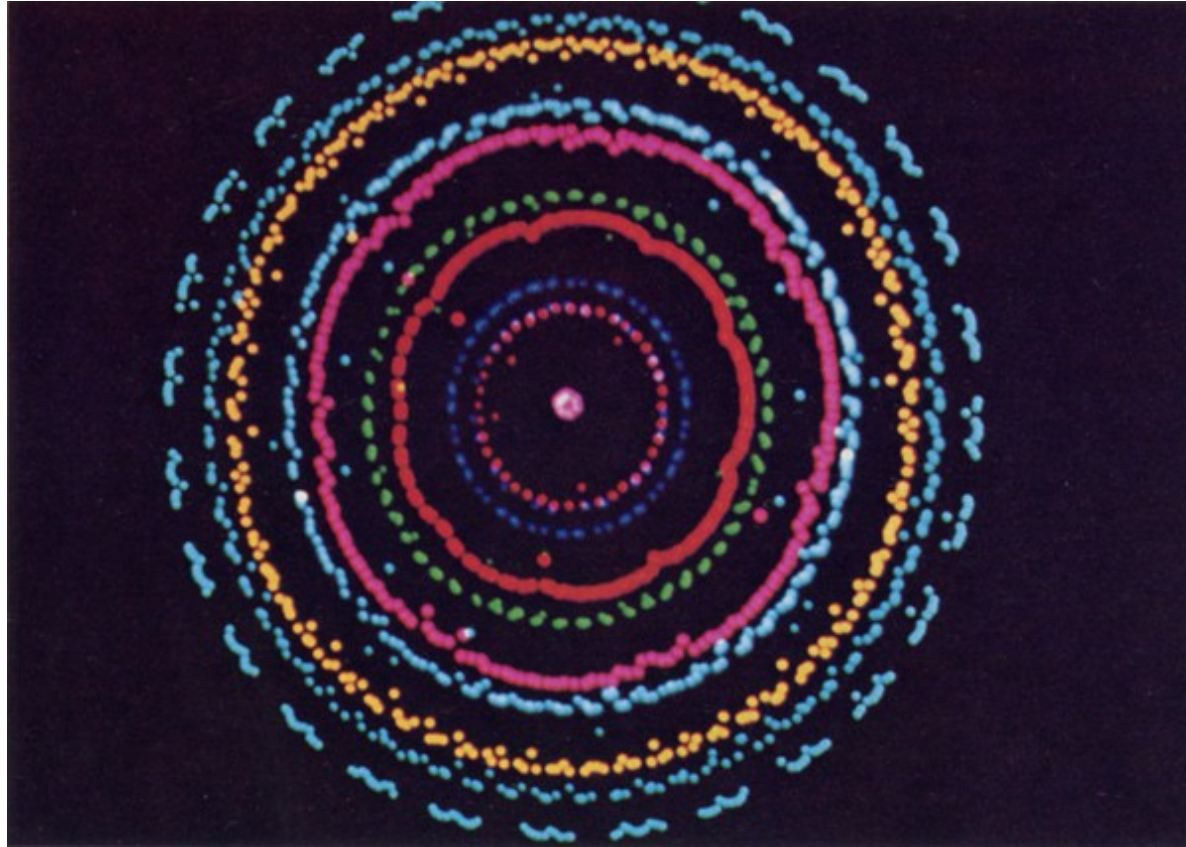
# FRIEDER NAKE



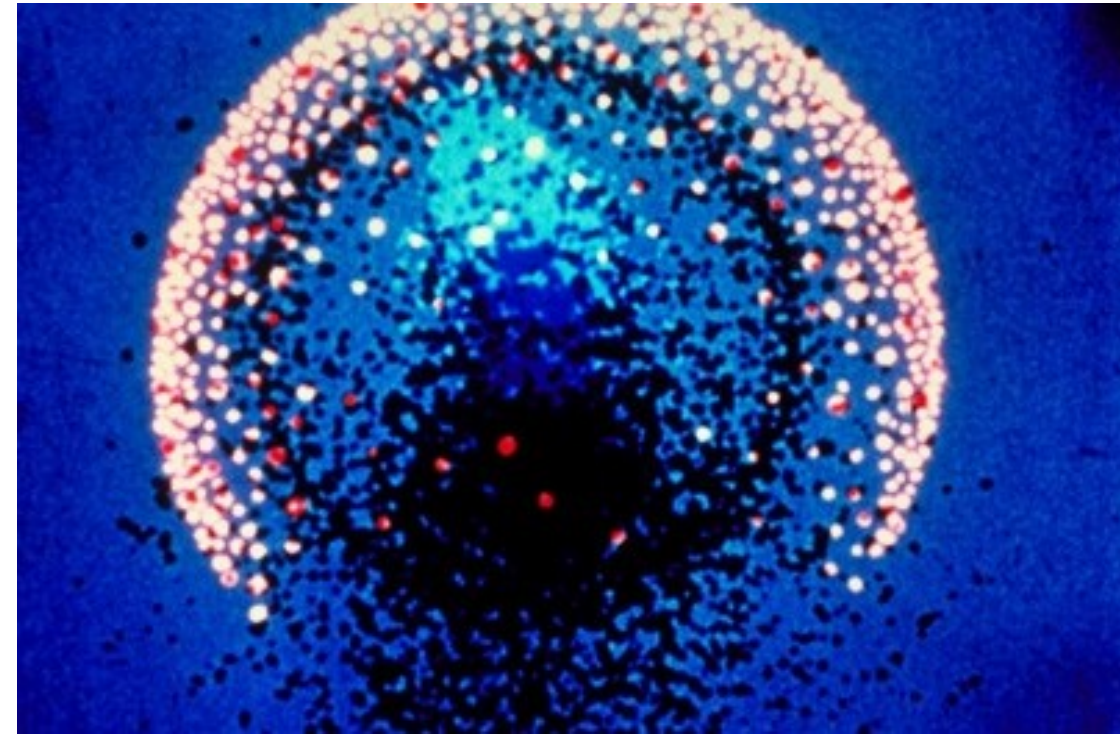
Paul Klee -Highroads and Byroads (1929) Hommage à Paul Klee 13/9/65 Nr.2  
(1965)

Random Polygons

# JOHN A JAMES WHITNEY



Permutations (1968)



Yantra (1957)

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

# CHARLES CSURI: HUMMINGBIRD 1967



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

# 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)

