

E.A.T.

Experiments in Art and Technology

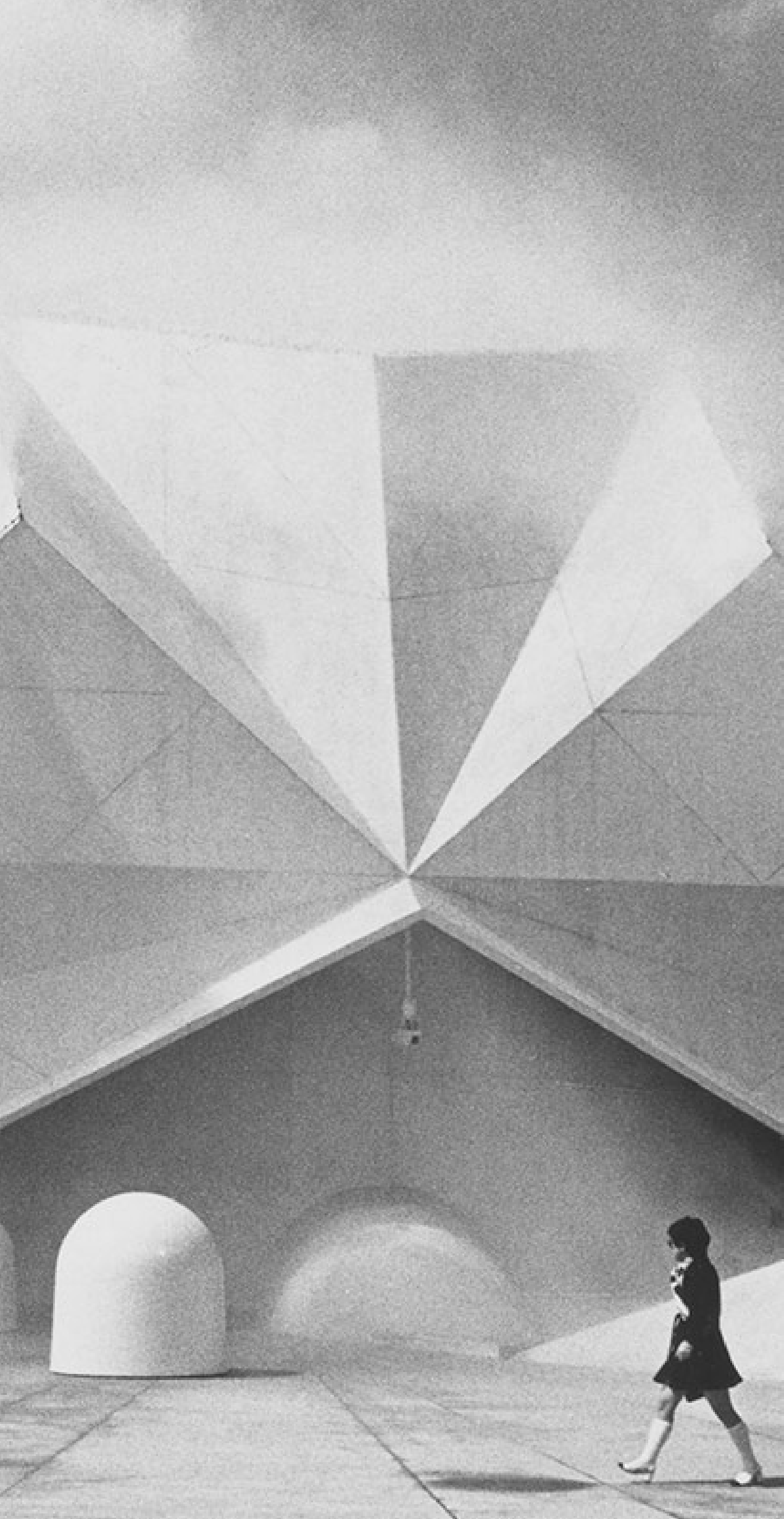




HISTORY



ARTISTS



ARTWORKS



NEW E.A.T.

effort that resulted in the "9 Evenings: Theatre and Engineering" at the 69th Regiment Armory in New York City in October 1966. The "9 Evenings" was the culmination of ten months interaction between 40 engineers and 10 artists. As a result, equipment was designed and built for ten new theatre, dance and music works, and was viewed by an audience of 10,000. The equipment was designed and built at a cost of \$35,000, not counting ~~the large portion of~~ contributed ~~help.~~ ^{MAN HOURS.} It is now the property of E.A.T. and is being made available to other artists. M.I.T. Technology Press will publish a book on "9 Evenings". A ²⁵~~30~~ minute film of the project is also available.

THIS EQUIP

HISTORY

In December 1966 a meeting was announced to artists in New York City to find out if E.A.T. could act as an organization for bringing artists closer to the technical world. Over 300 artists, critics and engineers participated in this meeting. Seventy-five artists had immediate technical problems. Since then, E.A.T. has received 300 applications from artists with ~~technical~~ projects, ~~all over the world.~~ ^{ALL OVER THE WORLD}

INVOLVING → TE

The interest in E.A.T. has not been limited to the artistic community. Numerous educators, universities and

The artists have shaped technology. They have helped make technology more human. They automatically will because they're artists.

-Billy Klüver

Background

During World War II many avant-garde artists fled to the USA

the experimental collaborations between different types of artists were carried over

Artists like Nam June Paik and John Cage started experimenting with new technologies in performances

Robert Rauschenberg at that time began incorporating performance in his work

Billy Klüver, engineer at Bell Labs, began collaborating with artists like Jean Tinguely, Andy Warhol and John Cage in the early 1960s



The beginning

In 1966 founded as pioneering group in NYC

Gathering of artists and engineers

They wanted to expand social role of artists

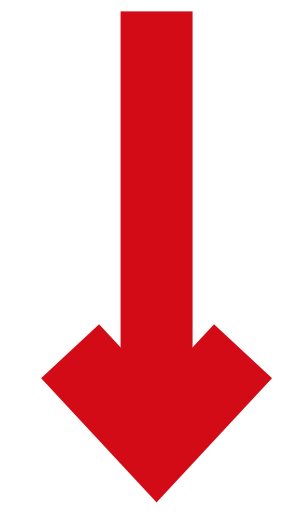
Reaction to the rapid development of technology

1967 then founded as non-profit organization

directed by Julie Martin

Robert Rauschenberg

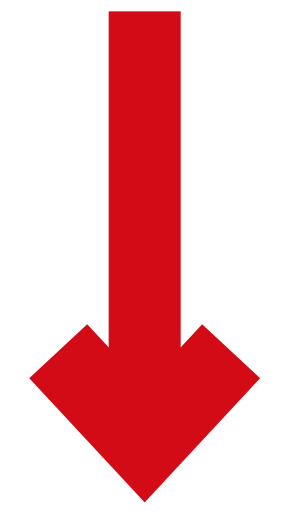
Robert Whitman



ARTISTS

Billy Klüver

Fred Waldhauer



ENGINEERS



9 Evenings: Theatre & Engineering

was originally to be the American contribution to the Stockholm Festival for Art and Technology

landmark collection of performances

created by 10 artists and 30 engineers

combining dance, fine arts, media, music, film and theatre

featured technological breakthroughs such as projection television or translating movement to sound

collaboration with Bell Telephone Laboratories (later Nokia Bell Labs)

similarities to movements of the same time period like fluxus or intermedia, but more forward and bridging the gap between those and Digital / Media Art

OCTOBER 13·14·15·16 18·19 21·22·23 8:30 P.M.

25th STREET ARMORY NYC TELEPHONE 689-3315

PERFORMANCES OF DANCE · MUSIC · FILM · TELEVISION · TECHNOLOGY BY CAGE · CHILD · FÄHLSTRÖM ·
HAY · HAY · PAULTON · RAIMER · RALSCHEWBERG · TUDOR · WHITMAN · EXECUTIVE COORDINATION KLÜVER

What makes E.A.T.?

Network to link artists and engineers

to provide interested artists with access to new technologies and assistance from engineers

Membership was open to every artist and engineer

Reaction to the rapid development and advancement of media technology

Wanted to make new technology more accessible for the people of that time, as it became more and more ubiquitous to their daily life

operated residencies in which artists and engineers could work closely together

E_NA_ET_WS

Volume 1, No. 2

June 1, 1967

Experiments in Art and Technology, Inc. 9 East 16th Street, N.Y., N.Y. 10003

The purpose of Experiments in Art and Technology, Inc. is to catalyze the inevitable active involvement of industry, technology, and the arts. E.A.T. has assumed the responsibility of developing an effective collaborative relationship between artists and engineers.

E.A.T. will guide the artist in achieving new art through new technology and work for the professional recognition of the engineer's technical contribution within the engineering community.

Engineers are becoming aware of their crucial role in changing the human environment. Engineers who have become involved with artist's projects have perceived how the artist's insight can influence his directions and give human scale to his work. The artist in turn desires to create within the technological world in order to satisfy the traditional involvement of the artist with the relevant forces shaping society. The collaboration of artist and engineer emerges as a revolutionary contemporary sociological process.

Initially, a successful working relationship between artists and engineers will require that each operate freely within his own environment. The function of E.A.T. is to create an intersection of these environments.

To ensure a continued fruitful interaction between a rapidly advancing technology and the arts, E.A.T. will work for a high standard of technical innovation in collaborative projects.

E.A.T. is founded on the strong belief that an industrially sponsored, effective working relationship between artists and engineers will lead to new possibilities which will benefit society as a whole.

Billy Klüver

Robert Rauschenberg

Development

Artists began to develop interest in technology

Eventually, the group became big very quickly and by 1969 had 2000 artist and 2000 engineer members and later more than 6000 members

they began having regular meetings and a newsletter, the E.A.T. News

ARTISTS





Robert Rauschenberg

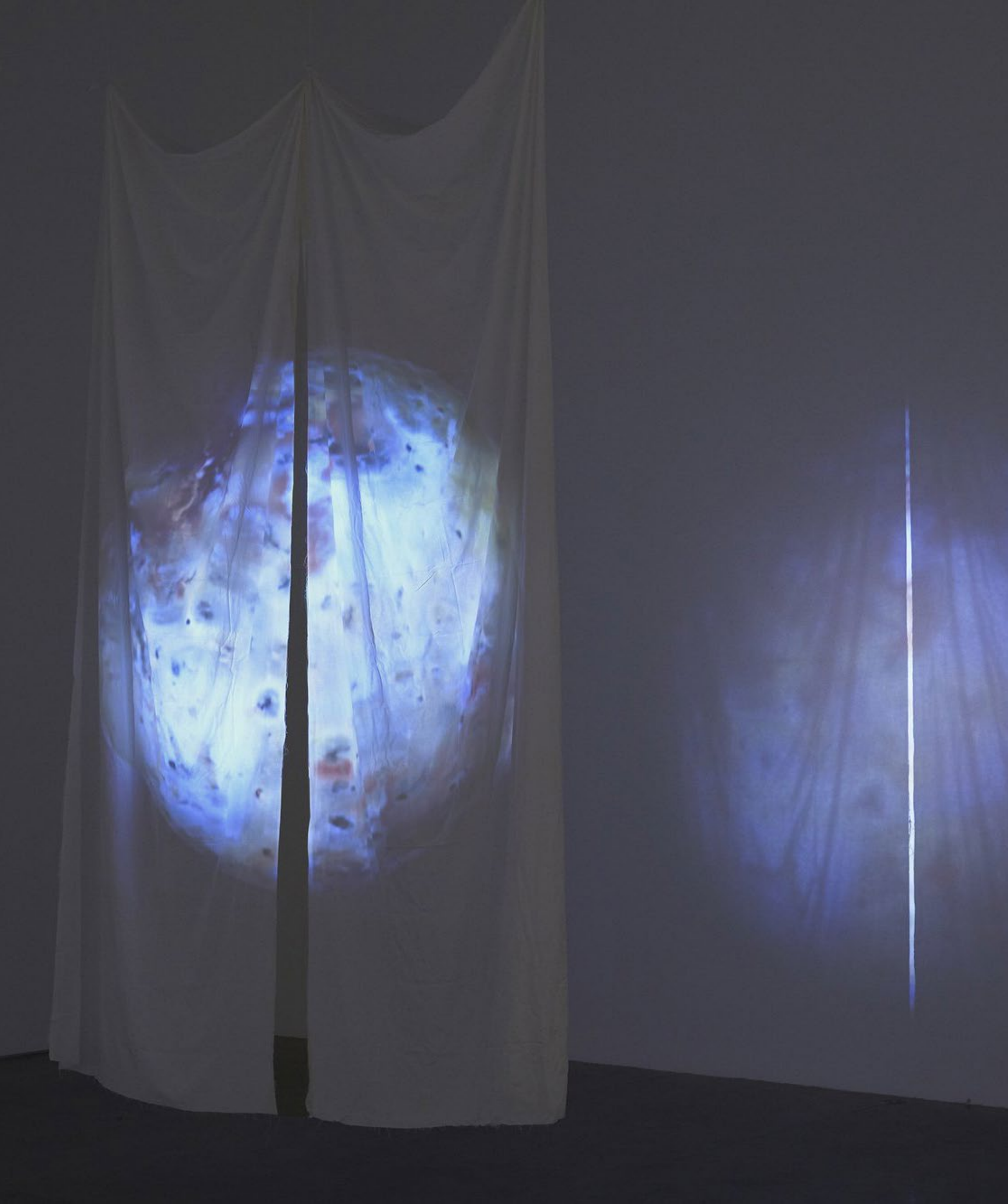
*1925 in Texas+2008 in Florida

famous as painter, graphic artist and sculptor

often associated with Pop-art movement and Neo-Dadaism

Later gained interest in dance, which was important for E.A.T.

At the 9 Evenings event he used infrared cameras, video projections and radio transmitters on tennis rackets to produce a multimedia performance



Robert Whitman

*1935 in New York

studied art history and literature

started his career as a performance artist

became interested in new technologies and later became famous for his laser sculptures and other installation artworks, especially with light and projections

also famous as a photographer



Fujiko Nakaya

*1933 in Japan

moved to the USA and Europe to study art (painting)

became Tokyo representative for E.A.T. in 1969

was invited to design fog sculpture for Pepsi pavilion at Expo'70 in Osaka and built the first water-based atmospheric fog sculpture

she has done many fog sculptures at galleries around the world

in the 70s she became a famous video artist and opened Japan's first video art gallery in 1980



Merce Cunningham

*1919 in Washington +2009 in New York

dancer and choreographer

had a passion for innovation and technology, that he used in his choreographies and dance pieces

was well known for his collaborations with famous artists of other disciplines, musicians and designers



Robert Breer

*1926 in Michigan +2011 in Arizona

painter, sculptor and filmmaker

he was known for his experimental filmmaking which combined abstract and representational painting, film footage, photography and other materials

was well known for his collaborations with famous artists of other disciplines, musicians and designers

he brought E.A.T to the Expo'70 in Osaka



David Tudor

*1926 in Pennsylvania +1996 in New York

pianist and composer of experimental music

was a pioneer in live electronic music and building electrical instruments

he composed music to Merce Cunningham's RainForest and other E.A.T. performances

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DARINES NOIRS NOIRS NOIRS NOIRS NOIRS NOIRS NOIR-
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TERREUX VERT VERT VIOLETTE VIOLETTE

OH! COCO, BRRR..BRRR..BRRR..AH! LALA, TU L'AS DIT,
BOUFFI!
LES CHAUSSURES «NIKE» QUE LÉON PORTE EXCLUSIVE-
MENT DEPUIS SIX ANS, L'ONT CONDUIT (PURE COÏN-
CIDENCE?) À NICE (NIKE) OÙ SUR LA PLAGE IL FAIT LA
CONNAISSANCE DE ROSE ROUSSE
LE SLIP (VERT POMME) DE ROSE ET SON ROUGE À
LÈVRES (ROUGE VIF) INSPIRENT LÉON (ANAGRAMMIS-
TE) «VERT ROUGE» LUI DONNENT «TROU VERGE» - AVEC
«ROUGE À LÈVRES» REPRIS HUIT FOIS, IL FAIT UN PO-
ÈME (POMPIER, DIT-IL) :
ROUGE À LÈVRES (VERS ROUGES, VERS LÉGERS) -
ROUE ROUGE, LA LÈVRE GOULUE S'OUVRE LARGE
À LA VERGE ROUGE, ROULE À REVERS, REVE À,
OSE, VA, SE RÉGALE.
ROSE ET LÉON SE MARIENT
PUIS (QUEL BONHEUR!) ROSA (PÉPÈTE) NAÎT

Jean Dupuy 1974 87C 481 (11)

Jean Dupuy

*1925 in France +2021 in France

he worked in conceptual art, performance art, painting, installations, sculptures, and video art.

was famous for his collaborations with George Maciunas, Nam June Paik, Carolee Schneemann and many more

he was involved in the Fluxus and Neo-Dada scene

pioneer in combining art and technology



Öyvind Fahlström

*1919 in Brazil +1976 Sweden

swedish multimedia artist, painter and poet

he was political, he questioned and criticised the political and entertainment industries

he made art in the Fluxus movement before becoming member of E.A.T.



ARTWORKS



RainForest

Merce Cunningham

“The title for “RainForest” came from Cunningham’s childhood memories of the Northwest, and the rainforest in the Olympic Peninsula. “RainForest” differed from Cunningham’s other pieces in that, with the exception of Cunningham, each of the six dancers performed his or her role, then left the stage and never returned.”

Stage design: Silverclouds by Andy Warhol

<https://www.youtube.com/watch?v= thwkNXM7Y>



Heart Beats Dust: Cone Pyramid

Jean Dupuy

in a black box a red light cone pyramid is seen and attached to a stethoscope

with ones heartbeat, a sculpture of dust can be created, as the stethoscope is connected to a speaker, mounted under a rubber membrane

for the dust Lithol Rubine is used as it is able to stay in air for long periods

<https://vimeo.com/425178489>



Ice Table

Hans Haacke

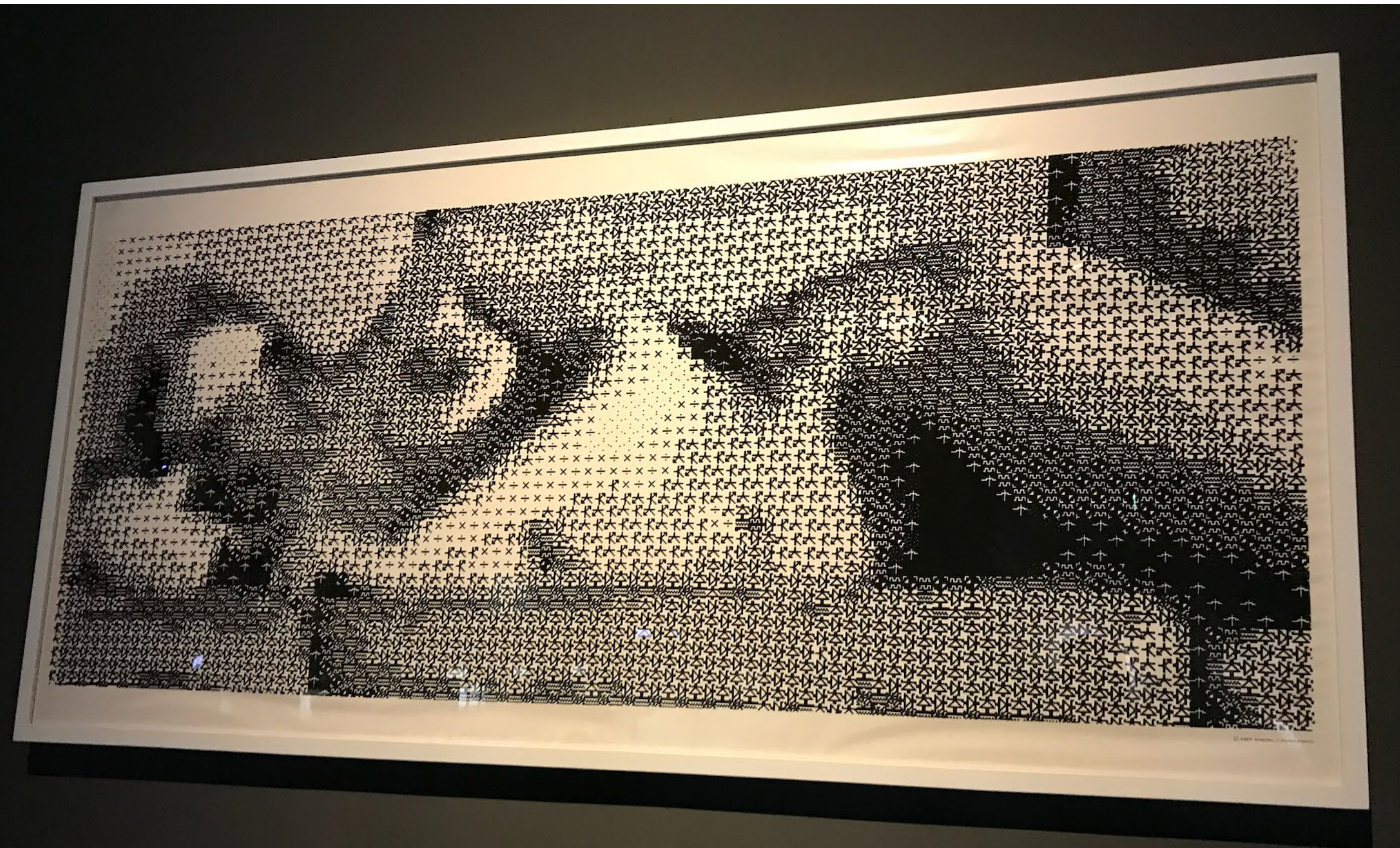
this installation shows his interest in the biological, ecological and cybernetic

he wanted to recreate natural processes and emphasized the “unstable nature of material through time-based movement and transition”

processes like condensation, evaporation, expansion and contraction in temperature change is prioritized in his work

Computer Nude (Studies in Perception I)

Ken Knowlton and Leon Harmon

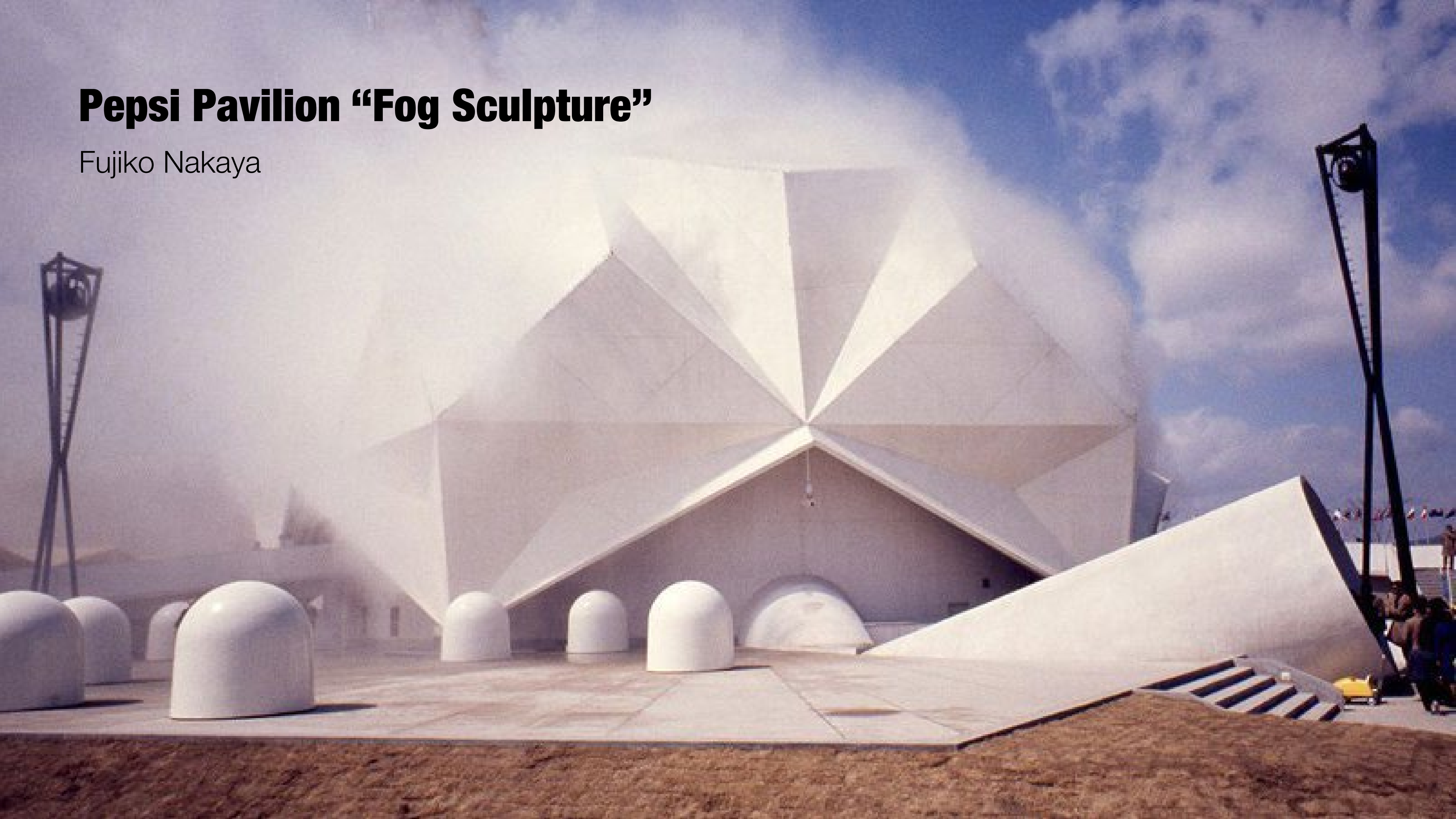


The composition illustrates the unique ability of the viewer's brain to interpret a composition of abstract symbols grouped to look like a human figure.

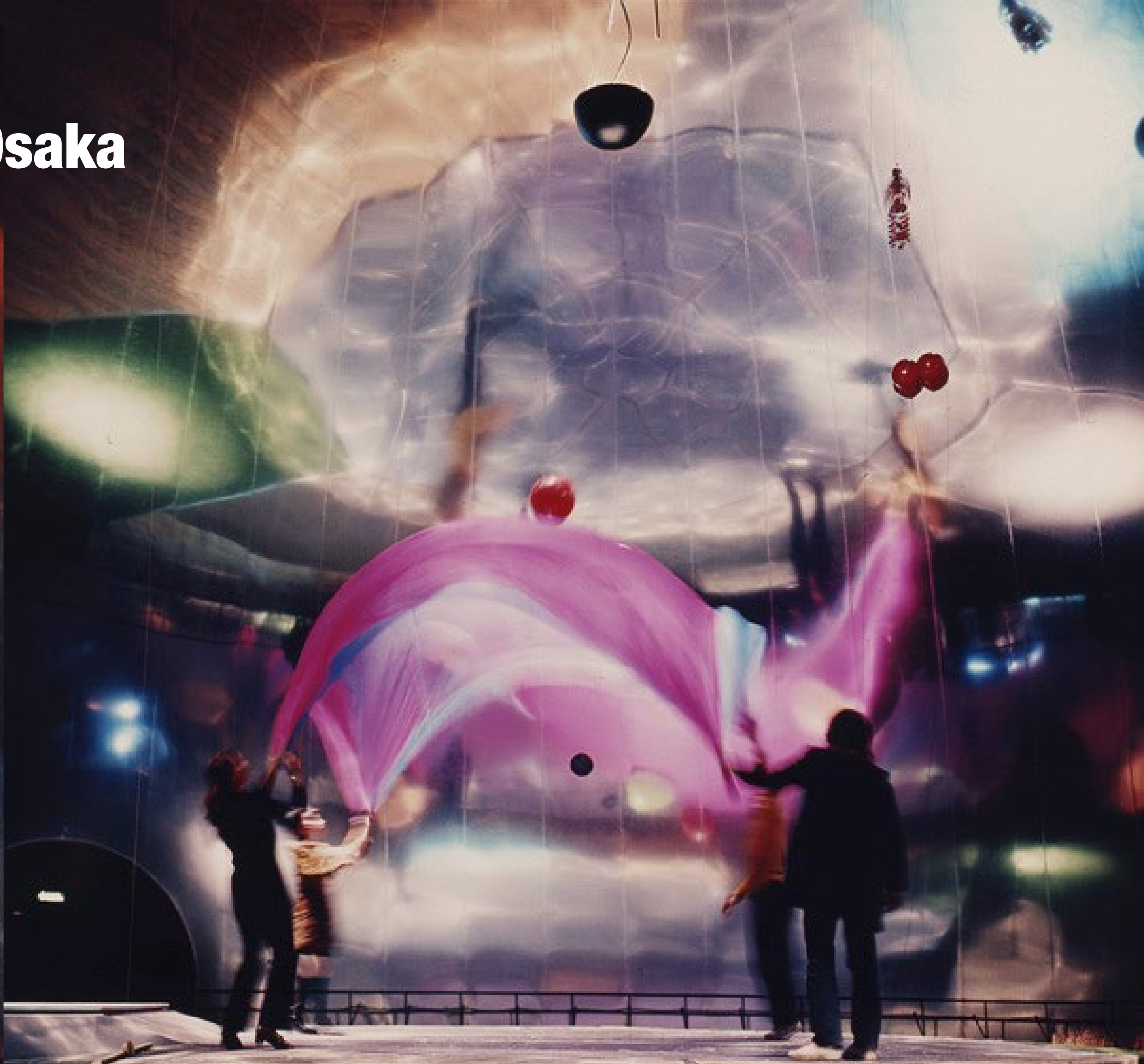
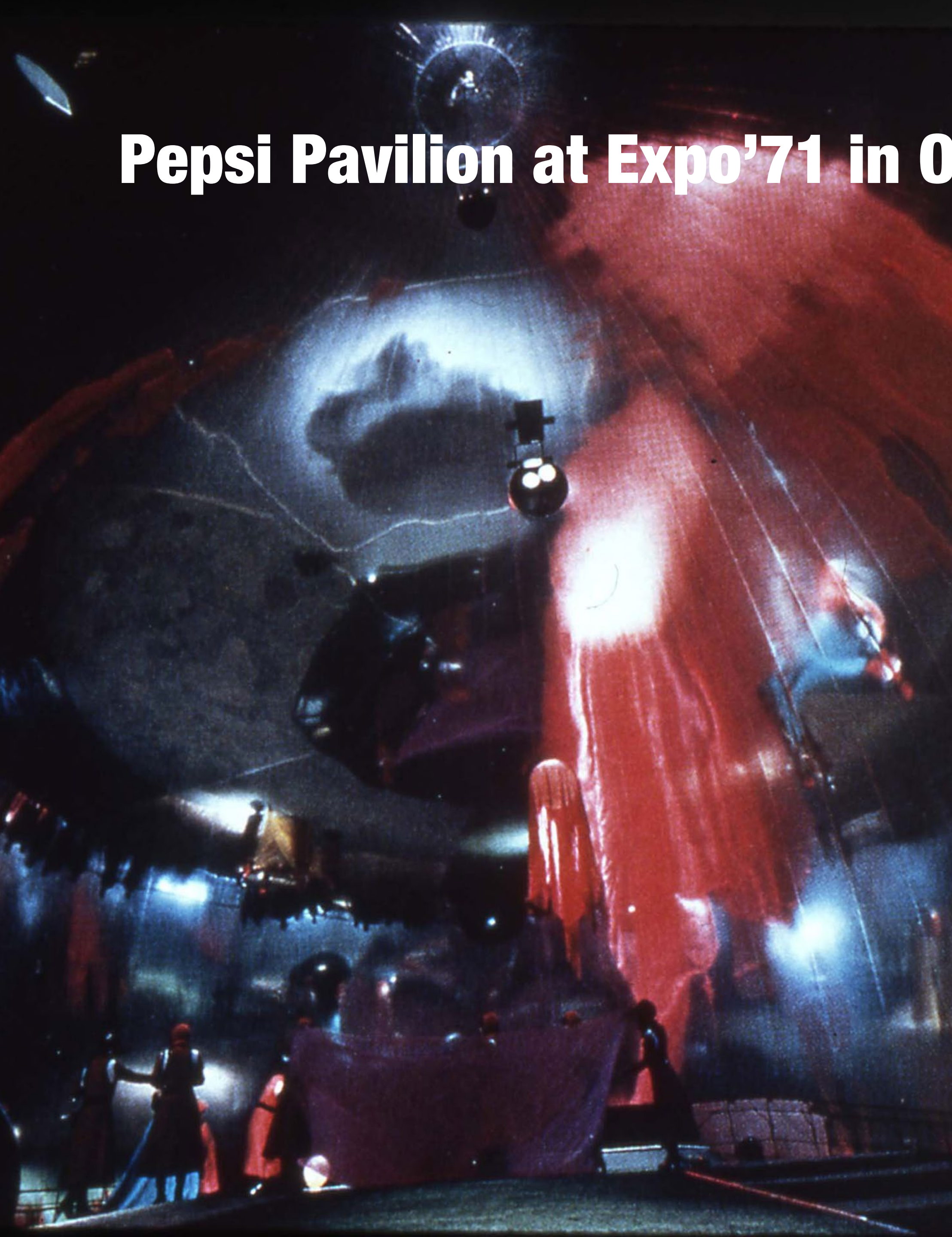
photograph of dancer Deborah Hay as a bit-mosaic using a program they developed

Pepsi Pavilion “Fog Sculpture”

Fujiko Nakaya



Pepsi Pavilion at Expo'71 in Osaka



<https://vimeo.com/24850126>



Floats

Robert Breer

Self moving, sound making kinetic sculptures

moving at very slow pace

when they hit an object, they go another direction

[Floats Video](#)



To
10637 AUGSVEN S
PCANY2322 1525
EATCENTRAL NYK
854106370
10637 AUGSVEN S

MAY 18, 1971
PONTUS HULTEN, DIRECTOR
MODERNA MUSEET

DEAR PONTUS,
HERE ARE OUR 50 QUESTIONS:

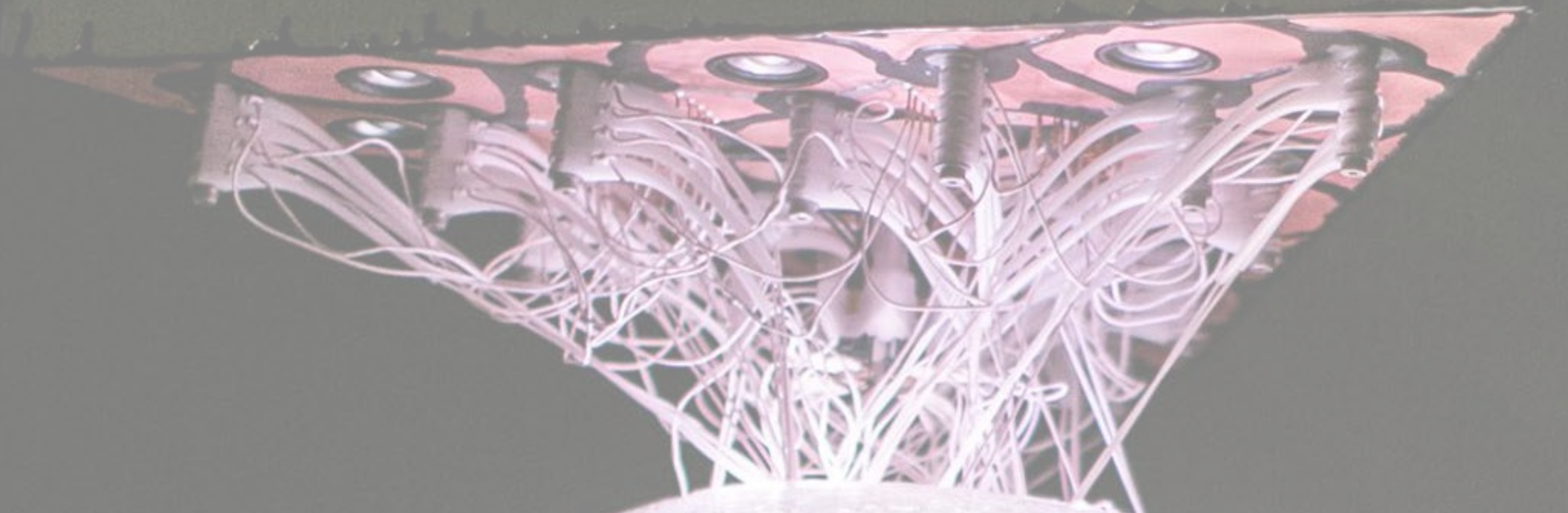
- 1 WHAT WILL THE RENTS BE LIKE?
- 2 WHAT WILL POT REPLACE ALCOHOL?
- 3 WHAT WILL REPLACE POT?
- 4 LIQUID/DRY FOODS--WHAT WILL THE RATIO BE?
- 5 WHERE WILL HUMANS GET MOST OF THEIR PROTEIN?
- 6 WILL FOOD BE MORE NATURAL (RAW MEAT AND VEGETABLES) OR MORE ARTIFICIAL (PILLS)?
- 7 WHAT ROLE WILL TASTES PLAY?
- 8 CAN WE ELIMINATE PART OF OUR SENSES?
- 9 WHAT ABOUT THE ROLE OF CAMPING?
- 10 WILL PEOPLE SEEK GREATER OR LESS CONTACT?
- 11 WILL PEOPLE CONGREGATE IN GROUPS OR COMMUNES--WHAT WILL BE THEIR SIZE?
- 12 WILL THE BIRTH RATE BE STABILIZED?
- 13 WHAT WILL BE THE NATURE OF THE REPRODUCTIVE PROCESS?
- 14 WHAT HUMAN FUNCTIONS WILL BE PRIVATE--SINGLE PAIRS GROUPS?
- 15 WHAT WILL BE THE CHARACTER OF MARRIAGE AND MAN-WOMAN RELATIONSHIPS?
- 16 TO WHAT DEGREE WILL SEX ROLES BE INTERCHANGEABLE?
- 17 WHAT WILL BE THE NATURE OF CHILDREARING?
- 18 HOW WILL PEOPLE TRAVEL AND TO WHAT EXTENT AND WHY?
- 19 WILL WORLD CULTURE BECOME MORE OR LESS HOMOGENEOUS?
- 20 WILL MEN WEAR NECKTIES?
- 21 WHAT WILL BE RECORDED?
- 22 WHAT WILL BE CONSIDERED NEWS?
- 23 WILL PEOPLE BE MORE GENEROUS?
- 24 WHAT NATURE WILL BUREAUCRACY HAVE?
- 25 TO WHAT EXTENT WILL WE BE RESPONSIBLE FOR ACTIONS OF THE PREVIOUS GENERATION?
- 26 WHICH WILL BE THE IMPORTANT INTERNATIONAL SUPERSTRUCTURE?
- 27 WHAT WILL REPRESENT SECURITY?
- 28 WHAT WILL BE THE ASPIRATIONS OF MAN?
- 29 WHERE WILL SOLUTIONS TO PROBLEMS LIE--TECHNOLOGY SOCIOLOGY POLITICS ETC.?
- 30 WHAT WILL OLD PEOPLE DO?
- 31 WHAT WILL PEOPLE THINK ABOUT 1991?
- 32 HOW OLD WILL BE OLD?
- 33 WILL OUR ATTITUDE TOWARDS ANIMALS CHANGE?
- 34 WHAT INSTITUTIONS WILL BE STABILIZED? (EDUCATIONAL SYSTEM, VOLUNTARY SYSTEMS, RECREATION ETC.)
- 35 WHAT WILL BE REVOLUTIONARY?
- 36 WHAT DISEASES WILL BE COMMON?
- 37 WHAT WILL BE THE RADICAL DISCONTINUOUS CHANGES IN THE NEXT TEN YEARS?
- 38 HOW WILL YOU DEFINE DIRTY?
- 39 WHAT WILL THE DOMINANT COLORS BE (IN NATURE IN CITY)?
- 40 WHAT WILL BE THE USE AND NATURE OF THE TELEPHONE SYSTEM?
- 41 WHAT WORLD LANGUAGES WILL BE ASSOCIATED WITH WHAT ACTIVITIES?
- 42 WHAT WILL PEOPLE WANT TO LEARN?
- 43 WILL THERE BE A POLICE FORCE?
- 44 WILL THERE BE A DEMOCRATIZATION OF INDIVIDUAL USES OF ENERGY (43'974:3' FOOD MOBILITY RESOURCES)?
- 45 WHERE WILL HUMAN BEINGS HAVE TO ADAPT TO SYSTEMS (MOVEMENT SPEECH TIME ETC.)?
- 46 WHAT WILL BE THE QUALITIES OF LEADERSHIP?
- 47 HOW OLD WILL YOU BE?
- 48 WHAT TYPE OF HEROES WILL THERE BE?
- 49 WILL THERE BE A DIFFERENCE BETWEEN WORK AND LEISURE?
- 50 WHAT WILL MONEY BE USED FOR THAT IT IS NOT USED FOR TODAY?

ARDS
Y
CENTRAL NYK
AUGSVEN S.....

Utopia Q&A (1971)

E.A.T. linked public spaces by telex (Network of printers) in New York (USA), Ahmedabad (India), Tokyo (Japan), and Stockholm (Sweden)

people could ask people in other countries questions about the future, about the year 1981

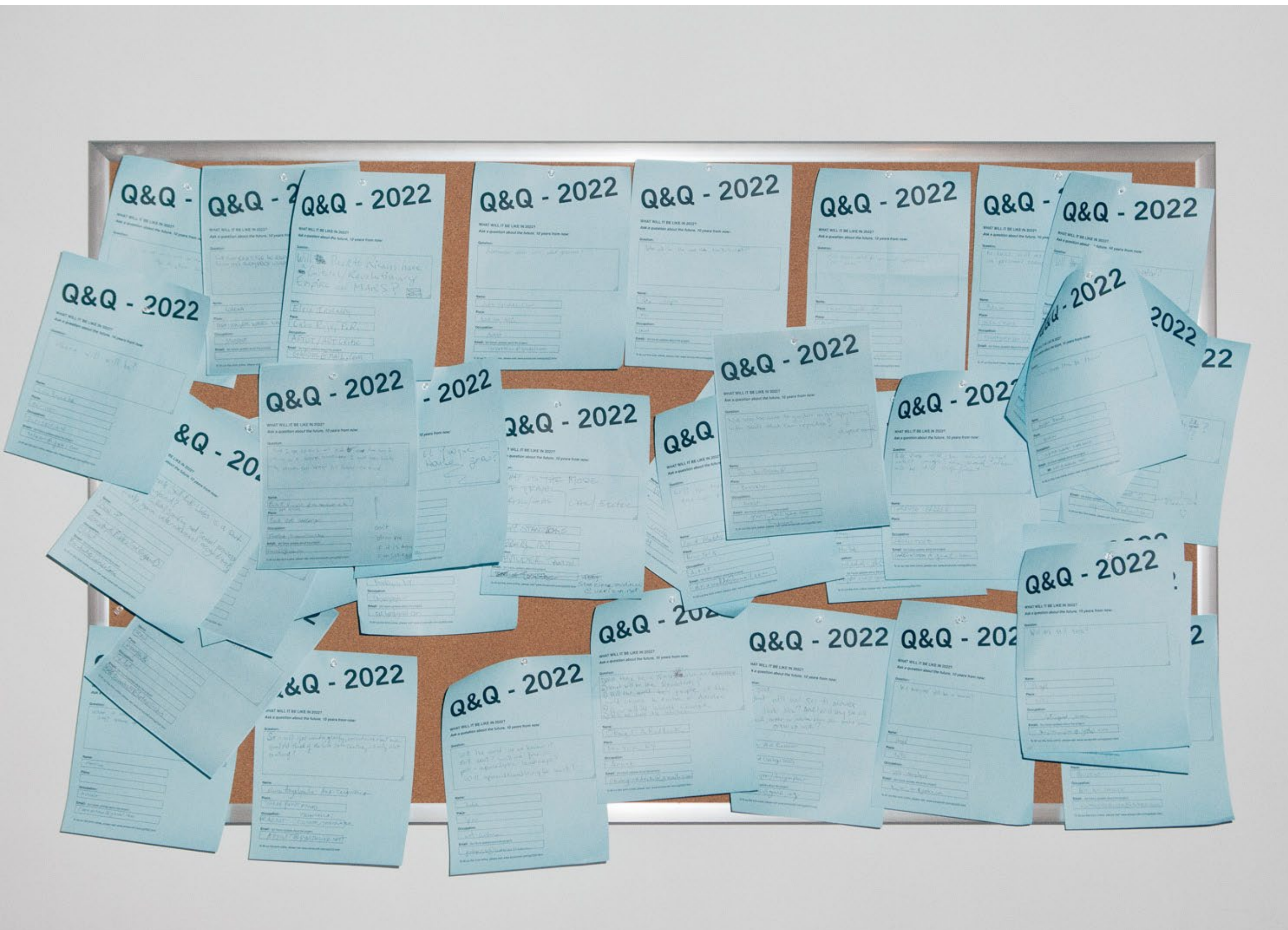


NEW E.A.T.



Anna Lundh

Q&Q-2022



<https://annalundh.com/qq2022/>

Q&Q-2028



<https://annalundh.com/qq2028/>

Q&Q-2022

What will be the 'equivalent' of smart phones in 2022?

In the future, will there be any polar bears?

Do we need to learn chinese?

Will the looming prospect of human bodies containing nanobots still frighten us? Would we be hackable? Would we care?

Will we be able to go outside?

Will there be a world revolution?

What will be the revolution?

Will there be a cure for the common cold?

Q&Q-2028

Will machines be men or men be machines?

Will people still meet at cafés?

Will I be happy?

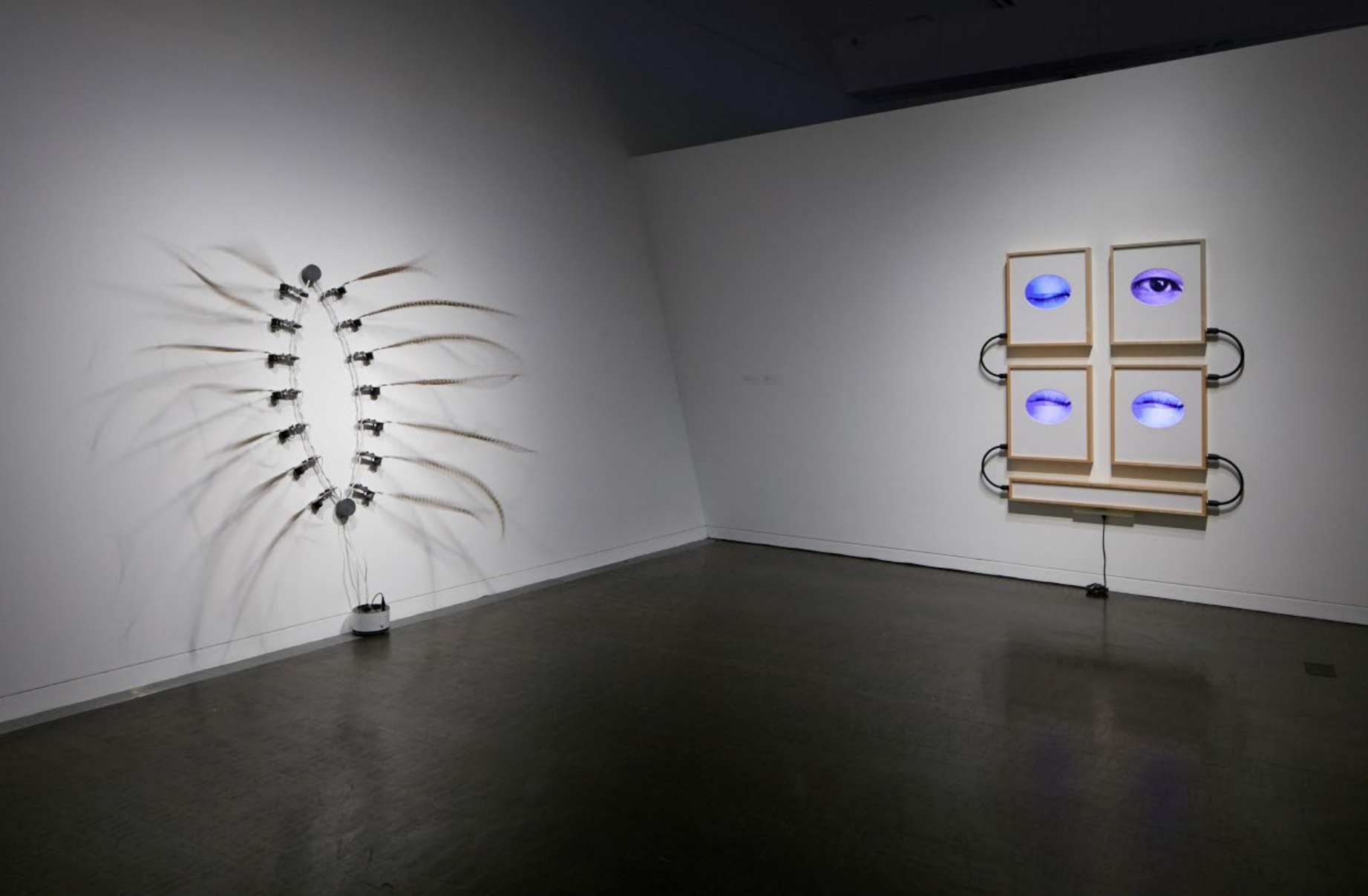
Will I have a girlfriend?

Will there be 'living and moving' art?

Will Korea develop?

Will we be able to age with a broader mind of understanding....?

Is the end of the world coming?



50th anniversary in San Francisco





<https://vimeo.com/188852342>



Further Experiments in Art and Technology

NEW INC in cooperation with Nokia Bell invited artist for 1 year residencies to work on the Bell Labs campus with engineers in the spirit of E.A.T. in the 60s.

Two years / two exhibitions

2017/2018 Only Human

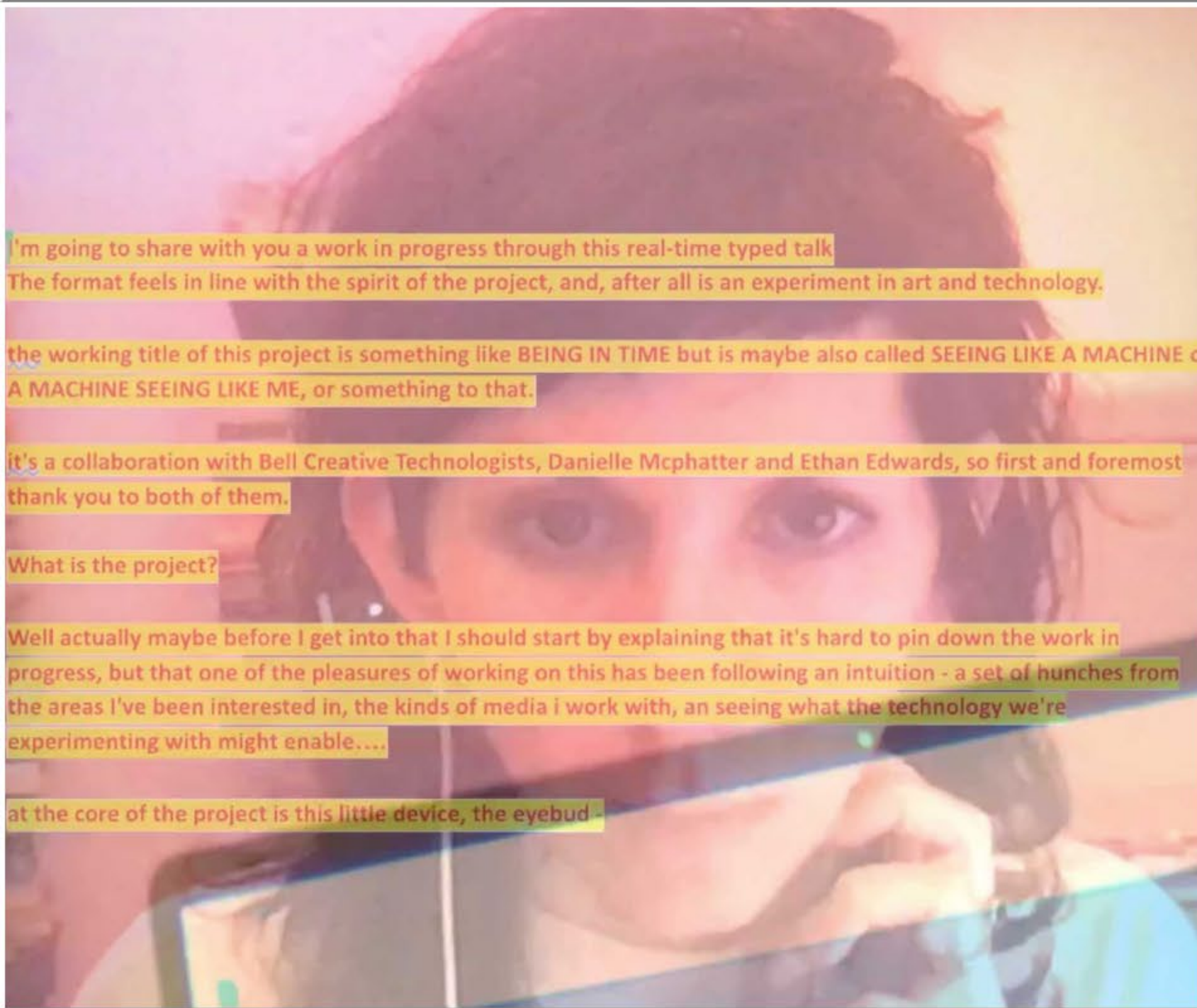
2020/2021 Further Experiments in Art and Technology

<https://www.newinc.org/nokia-bell-labs>

<https://www.manacontemporary.com/exhibition/onlyhuman/>

Further

Experiments



in

Art & Technology

NOKIA
Bell Labs

RHIZOME

**NEW
INC**

Andrew Demirjian

Foreign Objects

Kinlaw

Intro

About

Fei Liu

Sarah Rothberg

Mark Ramos &
Ziyang Wu

About

This exhibition showcases new works created by artists Andrew Demirjian, Foreign Objects, Kinlaw, Fei Liu, Mark Ramos & Ziyang Wu, and Sarah Rothberg as part of a unique collaboration between NEW INC, Rhizome, and the Experiments in Art & Technology program at Nokia Bell Labs.

Last year, Rhizome and NEW INC welcomed a cohort of artists and designers to the cultural incubator for a special year-long opportunity to pursue interdisciplinary practices in conversation and, ultimately, collaboration with the research community at Nokia Bell Labs. Artists were selected for their innovative use of digital tools and practices through a variety of forms including movement and performance, creative coding and design, and their alignment with the research subjects at Bell Labs: the futures of communication, networks, robotics, and more.

This cohort's work followed previous



Sources

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<http://cyberneticzoo.com/tag/robert-breer/>

<https://www.rauschenbergfoundation.org/art/artwork/estate>

<https://virtualgeometry.tumblr.com/post/172753502588/a-fog-sculpture-by-fujiko-nakaya-and-thomas-mee>

<https://www.pacegallery.com/artists/robert-whitman/>