



# Sound Art

A Very Brief Intro

## Sound Art

- The Art of Noise?
- Art that uses sound as a medium
  - Sound installations
  - Electronic and experimental music
  - Ambient music
- Somehow different than music...



[https://www.youtube.com/watch?v=SDFaX\\_-aOWE](https://www.youtube.com/watch?v=SDFaX_-aOWE)

## Forty Part Motet - Janet Cardiff (b 1957)

Forty separately recorded voices are played back through forty speakers strategically placed throughout the space.

## Experiment in F# Minor (2013)

<https://www.youtube.com/watch?v=SN5aT-e0Imk>

# Zimoun (b 1977)

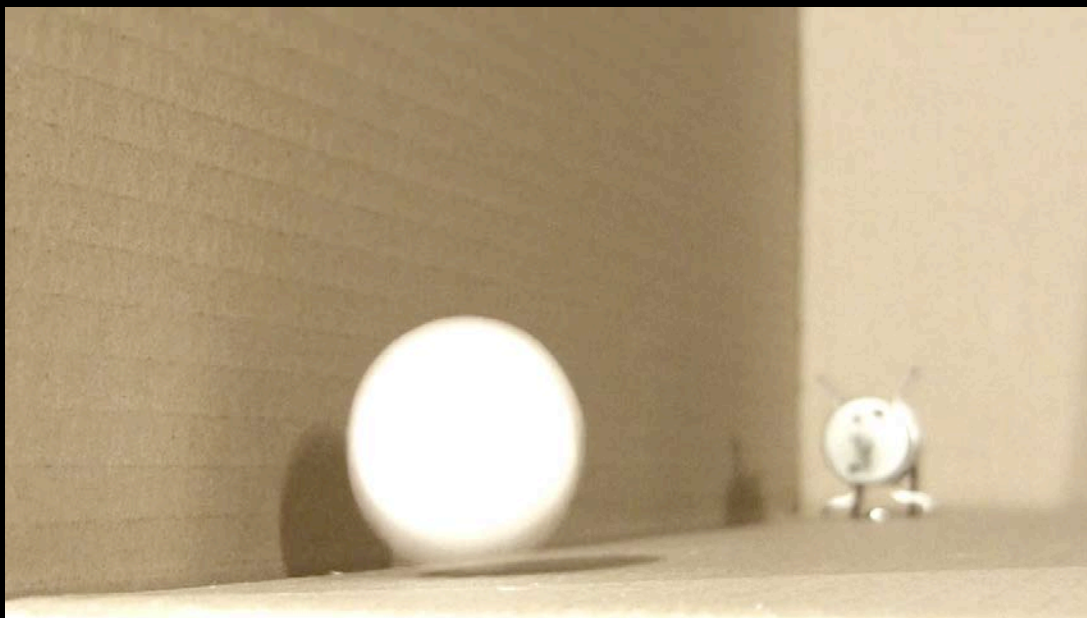
Swiss artist

Makes “sound sculptures”

for example: rotating balls on cardboard boxes



## Zimoun



# Zimoun

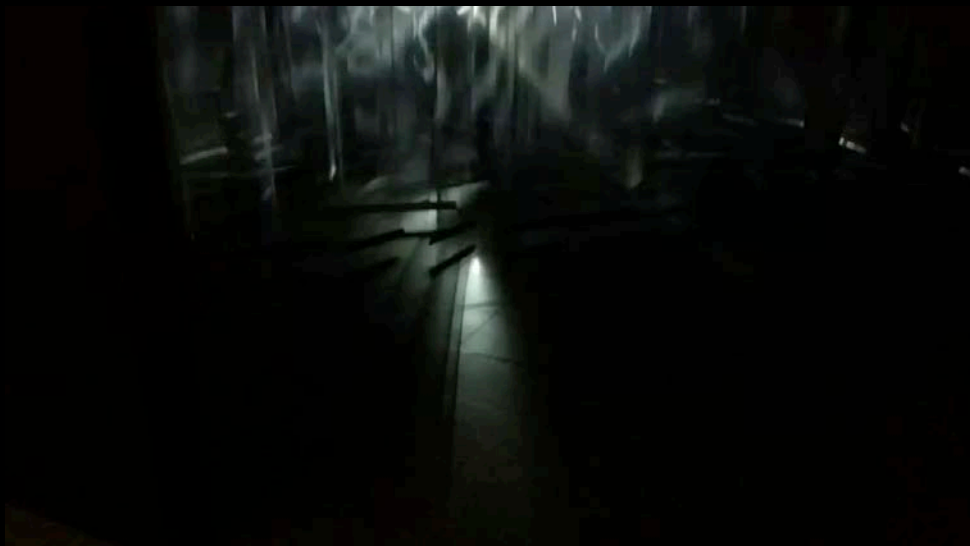


# Rafael Lozano-Hemmer

# Rafael Lozano-Hemmer

<http://www.lozano-hemmer.com/videos.php?id=22&type=Projects>

# Julio le Parc



<http://www.julioleparc.org/>

# Brian Eno (b 1948)

- Joined Roxy Music in 1971
- Has collaborated with Robert Fripp, David Bowie, Devo, David Byrne, Laurie Anderson, etc.
- A pioneer of ambient and generative music
  - low-volume music designed to modify one's perception of a surrounding environment.



## Brian Eno

*Ambient 1: Music for Airports (track 1 - 17:21)*

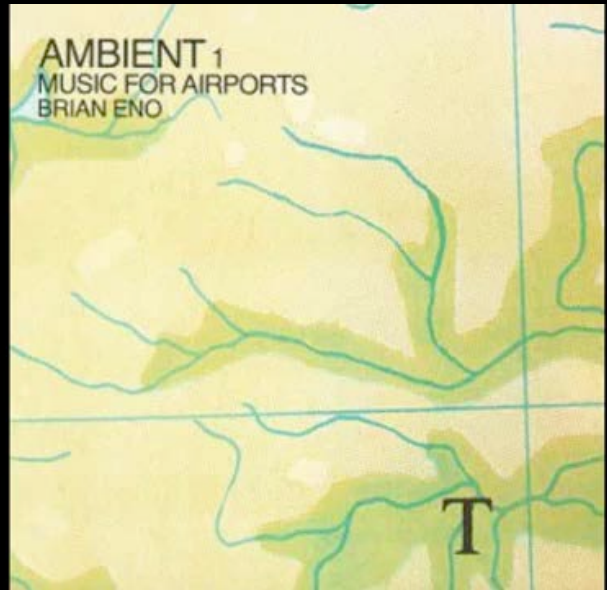
*"Music as ignorable as it is interesting."*



# Brian Eno

*Ambient 1: Music for Airports*  
(track 2 - 8:54)

*"Music as ignorable as it is interesting."*



<https://www.youtube.com/watch?v=73PF7tpHFBY&index=1&list=RD73PF7tpHFBY>

# Brian Eno

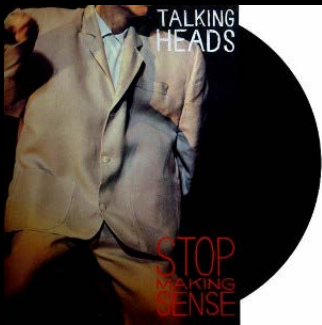
*Compact Forest Proposal (2001)*

There are 10 active CD players in this installation. Each is playing a specially cut CD, a single layer of the total music. The CDs have different numbers of tracks, some of which are silent, and each player is set to play these tracks in random order. The final music is therefore an ever-changing combination, unlikely to ever exactly repeat itself in any individual listeners experience.



# David Byrne (b 1952)

Talking Heads,  
1975-1991



<https://www.youtube.com/watch?v=Gea9SYUdJeY>

# Tim Hawkinson (b 1960)





# Tim Hawkinson (b 1960)



<https://www.youtube.com/watch?v=-D5aOUJ0QXM>

# Ragnar Kjartansson (b 1976) — The Visitors



<https://www.youtube.com/watch?v=qOxG711b0E>

## Tristan Perich (b 1982) Microtonal Wall. 2011.

1,500 speakers,  
each playing a  
single  
microtonal  
frequency,  
collectively  
spanning 4  
octaves.



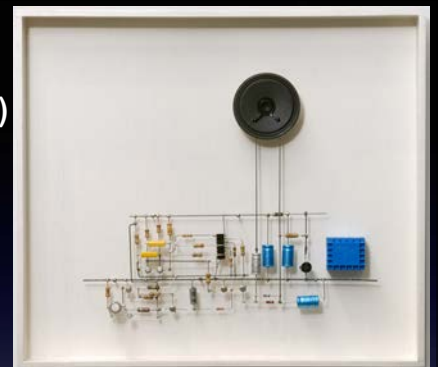
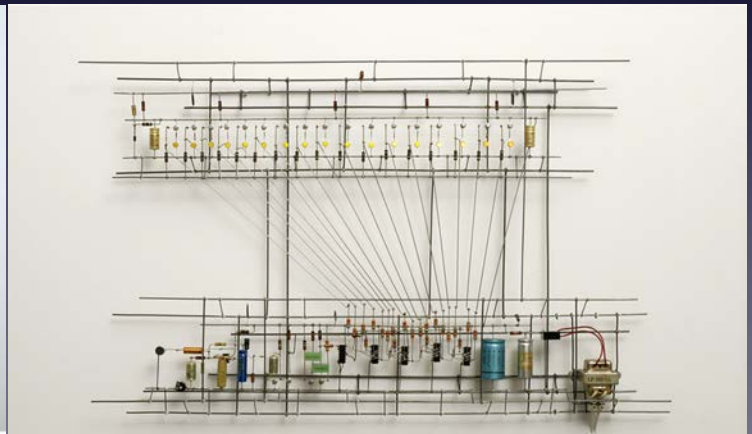
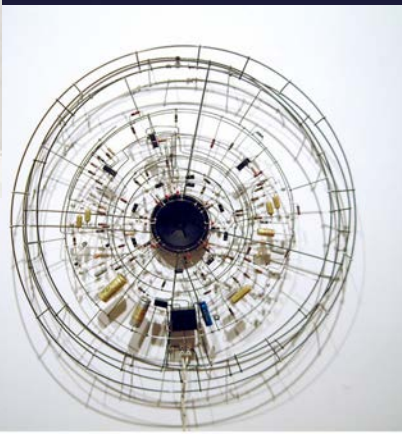
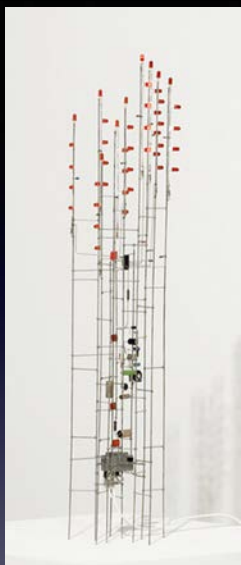
## Tristan Perich (b 1982) Microtonal Wall. 2011.

## Tristan Perich - 1-Bit Symphony



Tristan Perich's 1-Bit Symphony is an electronic composition in five movements on a single microchip. Though housed in a CD jewel case, 1-Bit Symphony is not a recording in the traditional sense; it literally "performs" its music live when turned on. A complete electronic circuit programmed by the artist and assembled by hand plays the music through a headphone jack mounted into the case itself.

## Peter Vogel (b 1954)



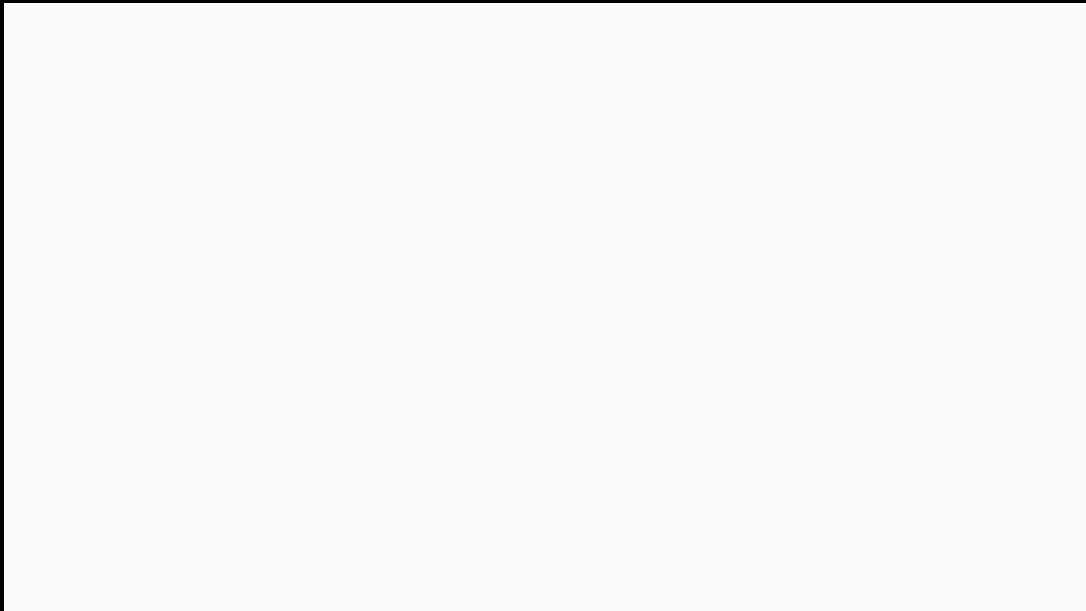
# Peter Vogel (b 1954)

## Soundwall Performance II

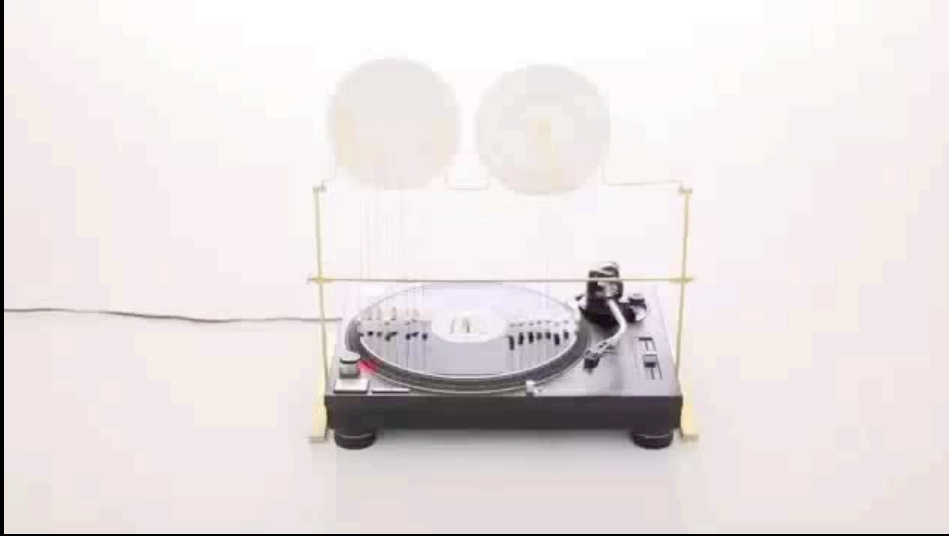
<https://www.youtube.com/watch?v=NlixUuoDrHw>

<https://www.youtube.com/watch?v=fU6qDeJPT-w>

# Steve Reich (b 1936)



# Pendulum Music



György Ligeti (1923 - 2006)

arte



1962 composition for 100 metronomes.

# Céleste Boursier-Mougenot (b 1957)



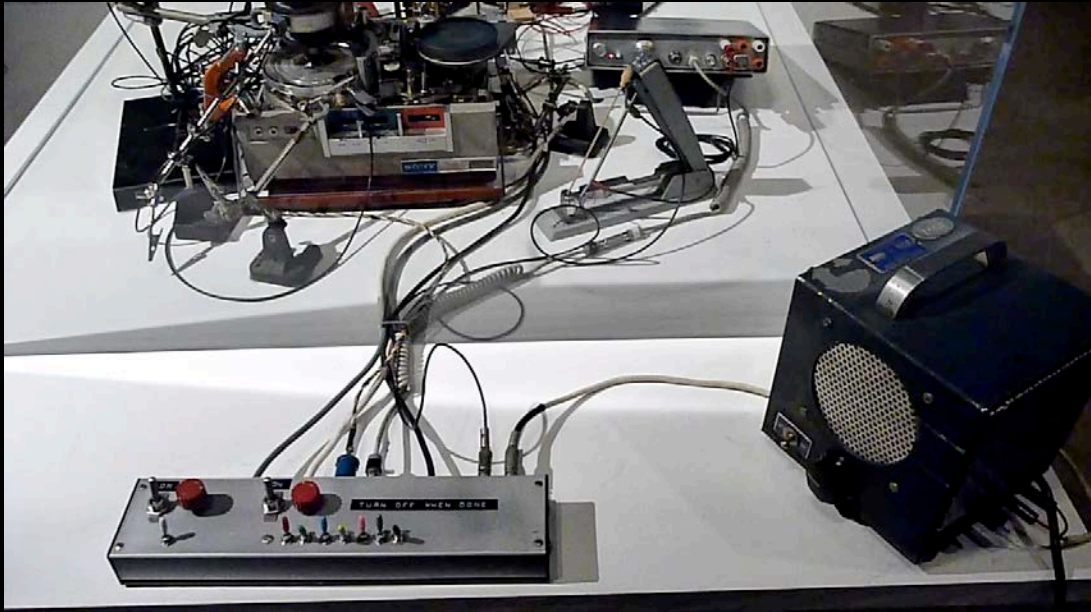
[https://www.youtube.com/watch?v=stFyG\\_AAje8](https://www.youtube.com/watch?v=stFyG_AAje8)

# Céleste Boursier-Mougenot

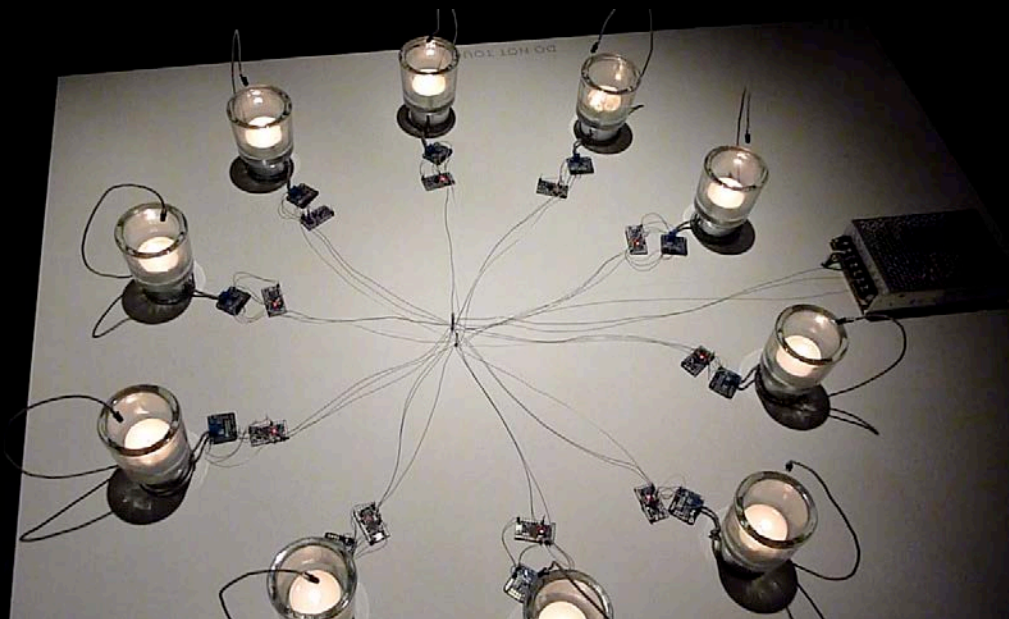




At CMU in 2016

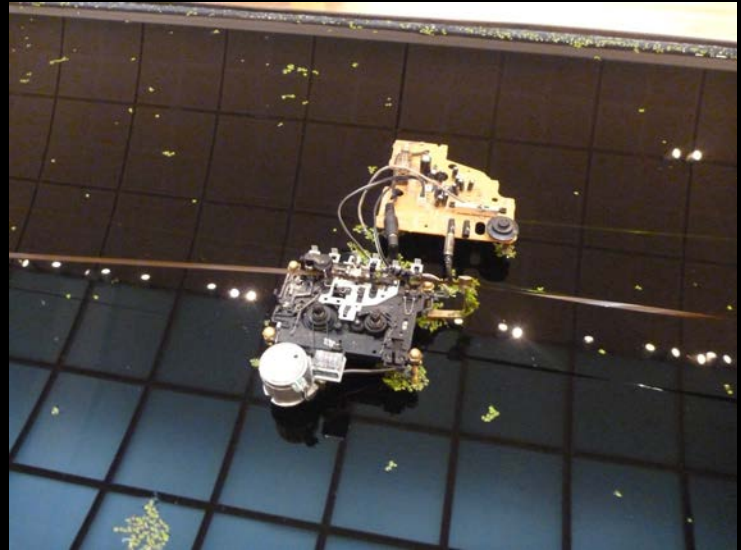


At CMU in 2016





# Evan Holm - Water Table



# Evan Holm - Water Table

# Richard Gareth

- Within Gareth's exhibiting projects one may encounter stand-alone objects, installations and multi-channel space interventions that invite observation on the conditions of sound and its reception into the processes of listening, immersion, communication, information noise and time.



[www.richardgaret.com/](http://www.richardgaret.com/)

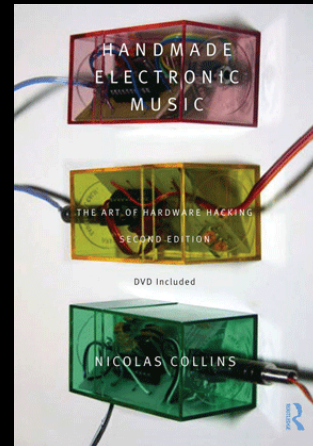
[https://www.youtube.com/watch?v=YkV-P\\_TkJk4](https://www.youtube.com/watch?v=YkV-P_TkJk4)

# Richard Gareth

<https://www.nicolascollins.com/>

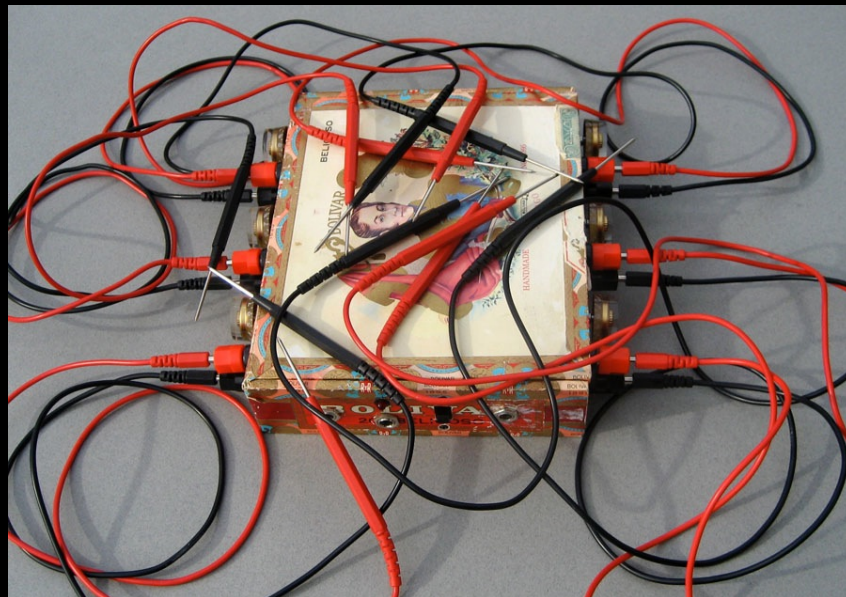
# Nicolas Collins (b1954)

- Pioneer of using microcomputers in live musical performances
- And in “hardware hacking:” turning random toys and other electronic devices into “instruments”
- Teaches at the School of the Art Institute of Chicago

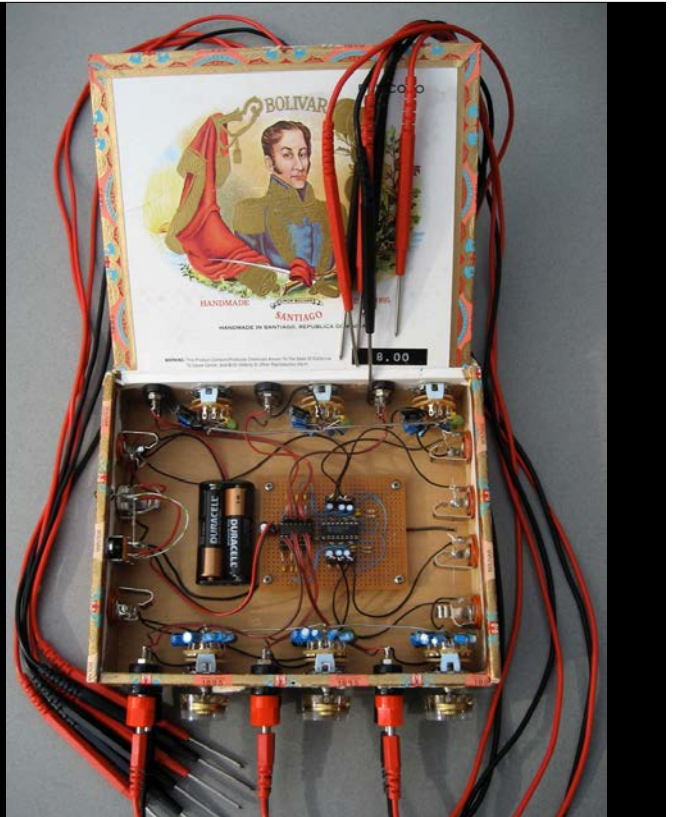


<https://www.nicolascollins.com/>

# Nicolas Collins



# Nicolas Collins

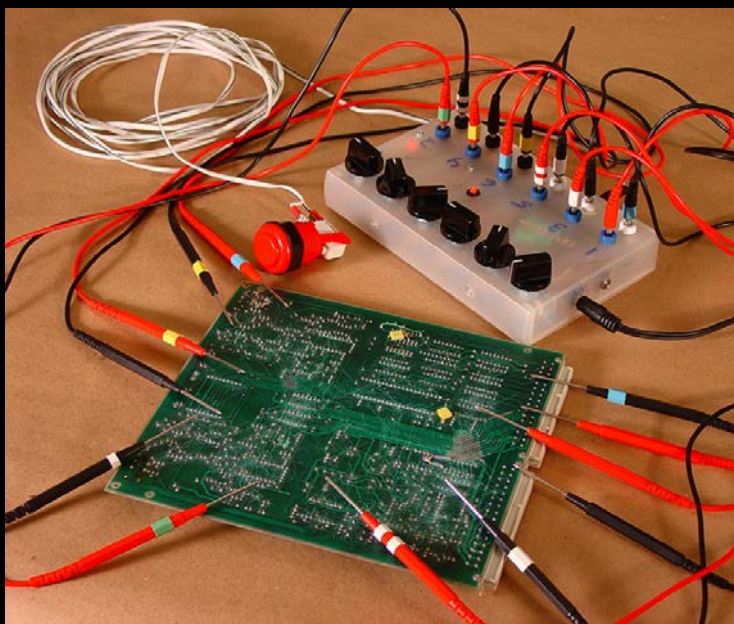


# Nicolas Collins





# Nicolas Collins



<https://www.nicolascollins.com/>

# Nicolas Collins

*In Memoriam Michel Waisvisz*  
(2009)

Nicolas Collins

Camera: Tommy Heffron

Four homemade  
oscillators are  
modulated by the  
flickering flame  
of a candle.

In Memoriam Michel Waisvisz (2009)



# Luigi Russolo (1885 - 1947)

Italian futurist  
The Art of Noise



## Italian Futurism

- Artistic and social movement in Italy in the early 20th century
- Emphasized speed, technology, youth and violence and objects such as the car, the aeroplane and the industrial city.
- The Futurists practiced every artistic medium, including painting, sculpture, ceramics, graphic design, industrial design, interior design, urban design, theatre, film, fashion, textiles, literature, music, architecture and even gastronomy.



# The Futurists



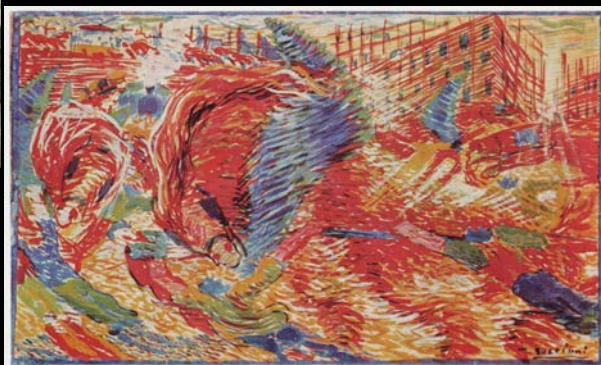
Futurists Luigi Russolo, Carlo Carrà, Filippo Tommaso Marinetti, Umberto Boccioni and Gino Severini in front of Le Figaro, Paris, February 9, 1912

## Futurist Art



Gino Severini  
Dynamic Hieroglyphic of the  
Bal Tabarin (1912)

Umberto Boccioni  
sketch of The City Rises (1910)





# Futurist Art



Umberto Boccioni, *Unique Forms of Continuity in Space* (1913)

# Futurist Art



Giacomo Balla, 1912,  
*Dinamismo di un Cane al Guinzaglio*  
(*Dynamism of a Dog on a Leash*)

# Futurist Art - Russolo



Luigi Russolo  
Dinamismo di un'Automobile (1912)

# Futurist Art - Russolo



Luigi Russolo, La Rivolta (1911)

# Futurist Art - Russolo



Luigi Russolo, Music, 1911

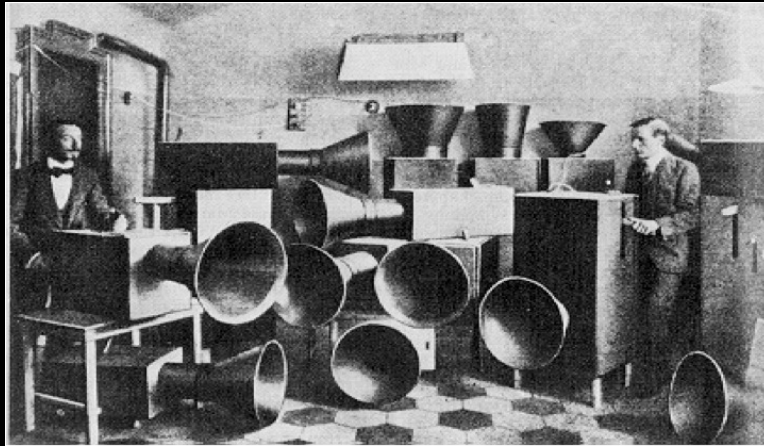


Solidity of Fog (Solidità della nebbia), 1912

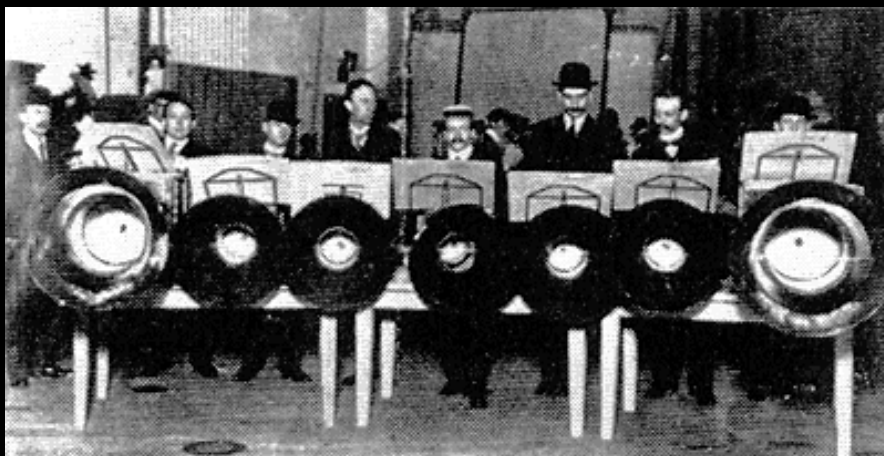
## The Art of Noise



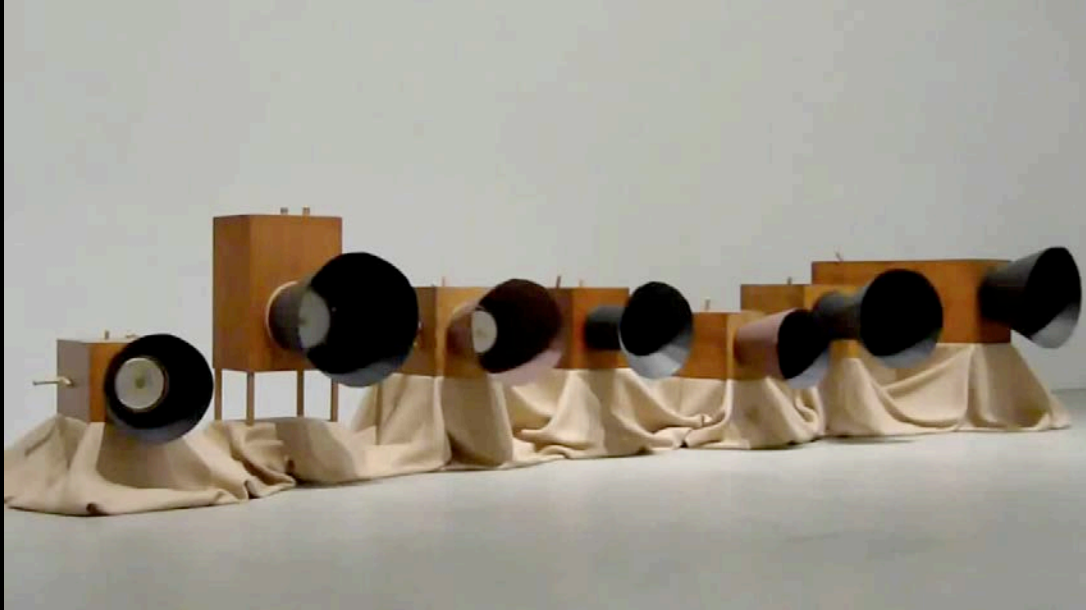
# Intonarumori



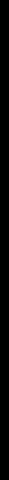
# Intonarumori



# Intonarumori

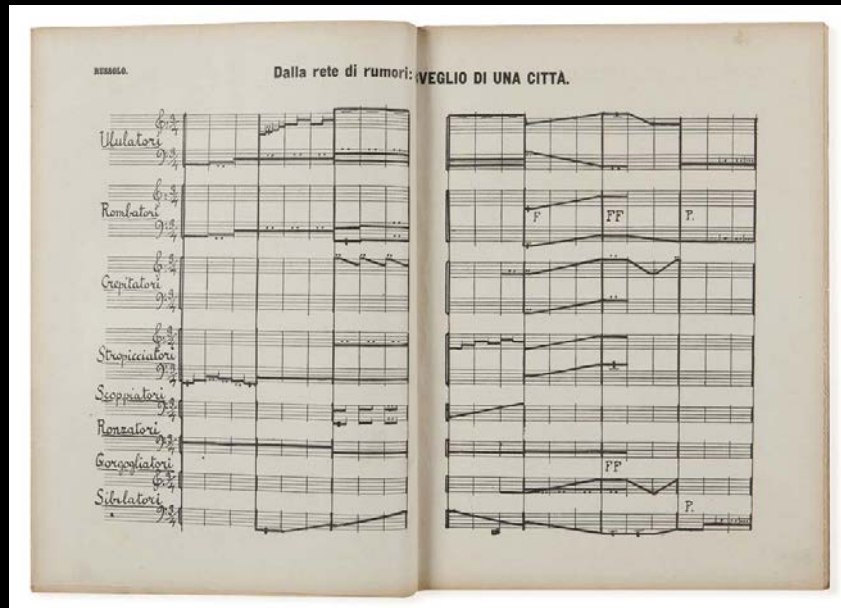


# Intonarumori



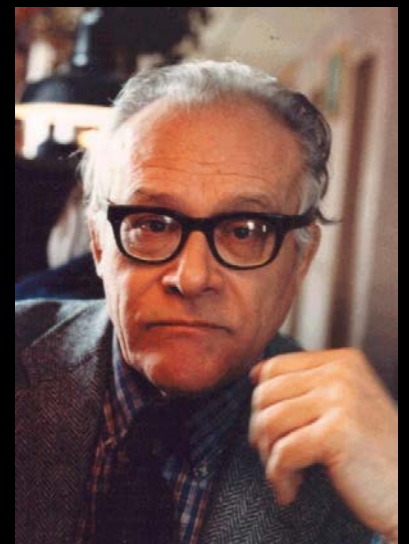


# Score for noise orchestra



**Vladimir Ussachevsky**

1911-1990



# Vladimir Ussachevsky (1911-1990)

- Pioneer of electronic music
  - “Tape music” in particular
- At Columbia University starting in 1947
  - Co-founded their electronic music studio
- Visiting prof at the UofU in the late 1970's
  - I (Erik) was lucky enough to take a class from him in 1979



## Columbia-Princeton Center for Electronic Music

1959

With Otto  
Luening





# Vladimir Ussachevsky



# Vladimir Ussachevsky



# Vladimir Ussachevsky



- Linear Contrasts - 1958 (3:48)
  - Tape recorders, audio oscillators, filters, reverberation, piano, and harpsichord
  - A classic piece of “tape music”
  - Blends “concrete” sounds and purely electronic sounds



## Columbia-Princeton Center for Electronic Music

1959

With Otto Luening

**In notes, Ussachevsky described the Center's aims:**

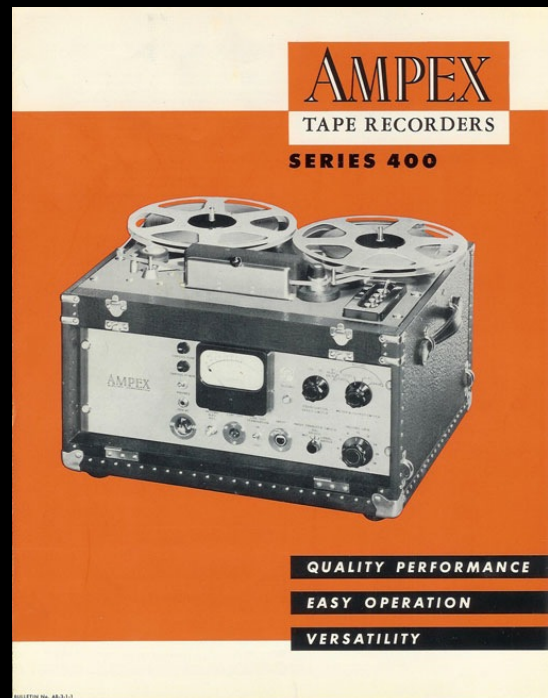
*“... a certain amount of research in sound synthesis and some analytical studies will proceed, parallel to the composers' creative work.”*

He goes on to mention work in musical acoustics, and supplementing studies in psychology, psychoacoustics, speech and electrical engineering

# Columbia



# Tape Recorders



# Tape Recorders

**"The tape recorder was put in my charge, and one day I suddenly realized that it could be treated as an instrument of sound transformation." - Ussachevsky**

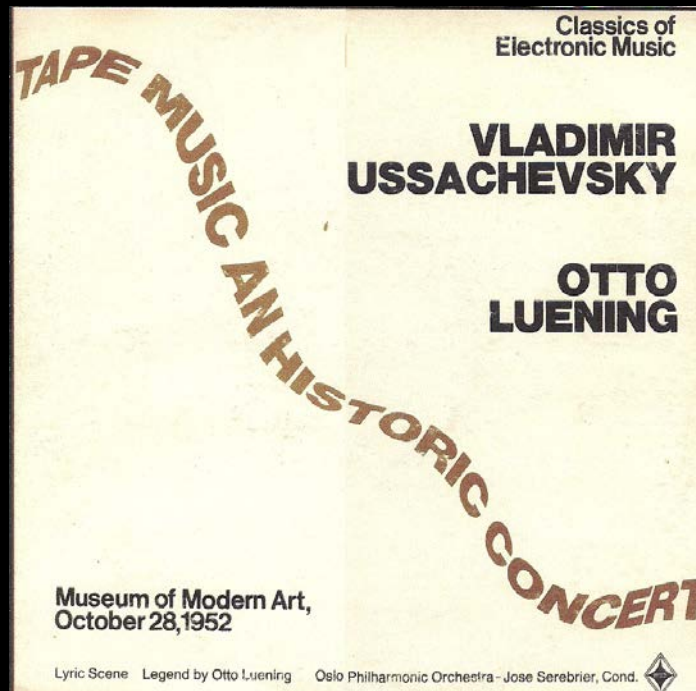


# Tape Music

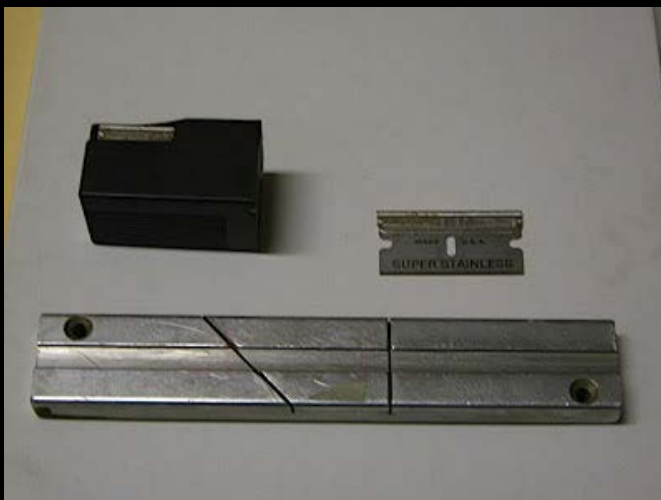




# Tape Music



# Tape Music



# Ussachevsky at Utah



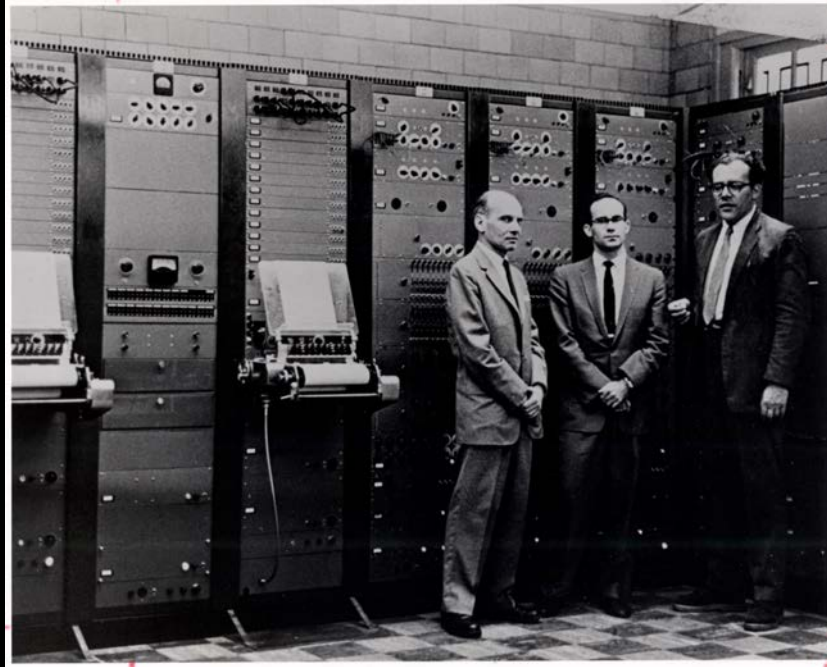
Ussachevsky display  
McKay Music Library

Nov. 2 - Nov. 7

# Steiner Synthesizer



# RCA Mark II Sound Synthesizer

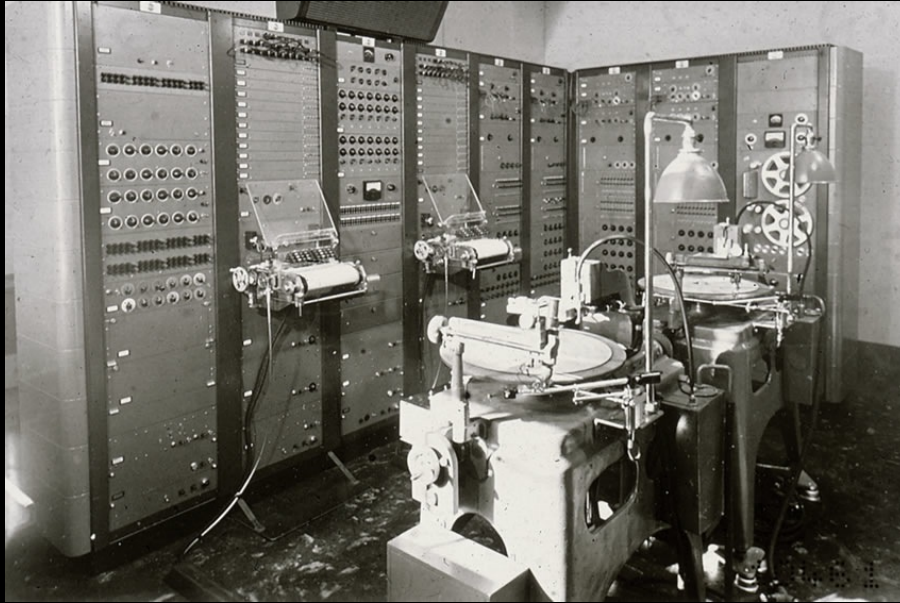


# RCA Mark II Sound Synthesizer





# RCA Mark II Sound Synthesizer



# RCA Mark II Sound Synthesizer



Office of Brad Garton, Professor of Music at Columbia

# Archives at Columbia



## The Archives contain:

- **4,859 reel-to-reel tapes** (ca. 55% 10" and 45% 7" reels)
- **700 recordings in other formats** (DATs, phonorecords, CDs, etc.)
- **ca. 72 linear feet of printed documents, manuscripts, and ephemera**
- I conducted a **rough survey and inventory** to obtain the best estimate I could, within time constraints

# Sound Art installations

outside

# UW Arboretum 2012



# UW Arboretum 2012





# UW Arboretum 2012



# UW Arboretum 2012



<http://www.doaks.org/research/garden-landscape/contemporary-art-installations/hugh-livingston>

# Hugh Livingston 2014

The Pool of 'Bamboo Counterpoint'.



## Illumination - Christian Skjodt, 2014

<http://skjodt.net/illumination/>

