

MUSIQUE CONCRETE

The idea of musique concrète is that you use the sounds of the world as a synthetic engine, and then create your own world noise out of it, which becomes something utterly unlike the sounds of the world; the idea as I understand it is not to retain the flavor of the way things sound in the world, but to create an entirely new sound world out of the sounds of the world.

Paul Lansky in interview with Joshua Cody (1996)

- * Rapid advances in technology as a result of the Second World War, interest from many quarters in new sound techniques and an expanding economic climate provided sufficient for institutions to provide support for the development of electronic music.
- * In Europe, two broadcasting networks established studios, Radiodiffusion Television Francaise (RTF) in Paris and Westdeutscher Rundfunk (WDR) in Cologne.

Pierre Schaeffer

- * Pierre Schaeffer, an electronic engineer, served his apprenticeship with the Radiodiffusion-Télévision Française (RTF) during the 1930s after training at the Paris Polytechnic. In 1942 he persuaded the corporation to initiate research into the science of musical acoustics with himself as director.
- * Photo: Schaeffer with the phonogene.



Pierre Schaeffer

- * Schaeffer's attention was drawn towards the use of recording techniques as a means of isolating naturally produced sound events.
- * The introduction of tape recorders enabled composers to record sound sources from all over the world.
- * The term 'tape music' refers to music composed with sounds that have been recorded on tape, then edited. This definition has of course since changed.

Ideas before Tech

- * Many composers working before the age of recording had the vision but not the means.
- * One of the first electronic compositions was John Cage's 1939 Imaginary Landscape No.1. But even this needed to use recordings of oscillators on gramophone records in order to be realised.
- * John Cage was the first to consistently explore the use of nontraditional sounds in music. In the style of Ferruccio Busoni and Edgard Varese, who earlier in the century had theorised that music might include all sounds, Cage said 'I believe that the use of noise to make music will continue and increase until we reach a music produced by the aid of electrical instruments...'
- * Throughout the 1940s and 1950s, Cage used radios, phonograph records, tin cans and other nontraditional sound sources in his works.

Pierre Schaeffer

Etude aux chemins de fer (1948)

- * In 1948 he started to consider how such material might be used as a basis for composing.
- * Schaeffer called his work musique concrete because of the ways it differed from 'traditional' music. Instrumental music, he noted, was abstract.
- * The qualification of 'abstract' is used to describe ordinary music because it is first conceived of in the mind, then notated on paper and finally realised only by instrumental performance.
- * Musique concrete, on the other hand, begins with pre-existing sound elements which may be music or 'noise'. The elements are then manipulated and a montage is created.
- * According to Schaeffer, traditional music starts with the abstract and becomes concrete, while 'new' music starts with the concrete and becomes abstract through experimentation and composition.
- * Schaeffer wrote 5 etudes which were broadcast over French radio titled "Concert de Bruits", meaning concert of noises.

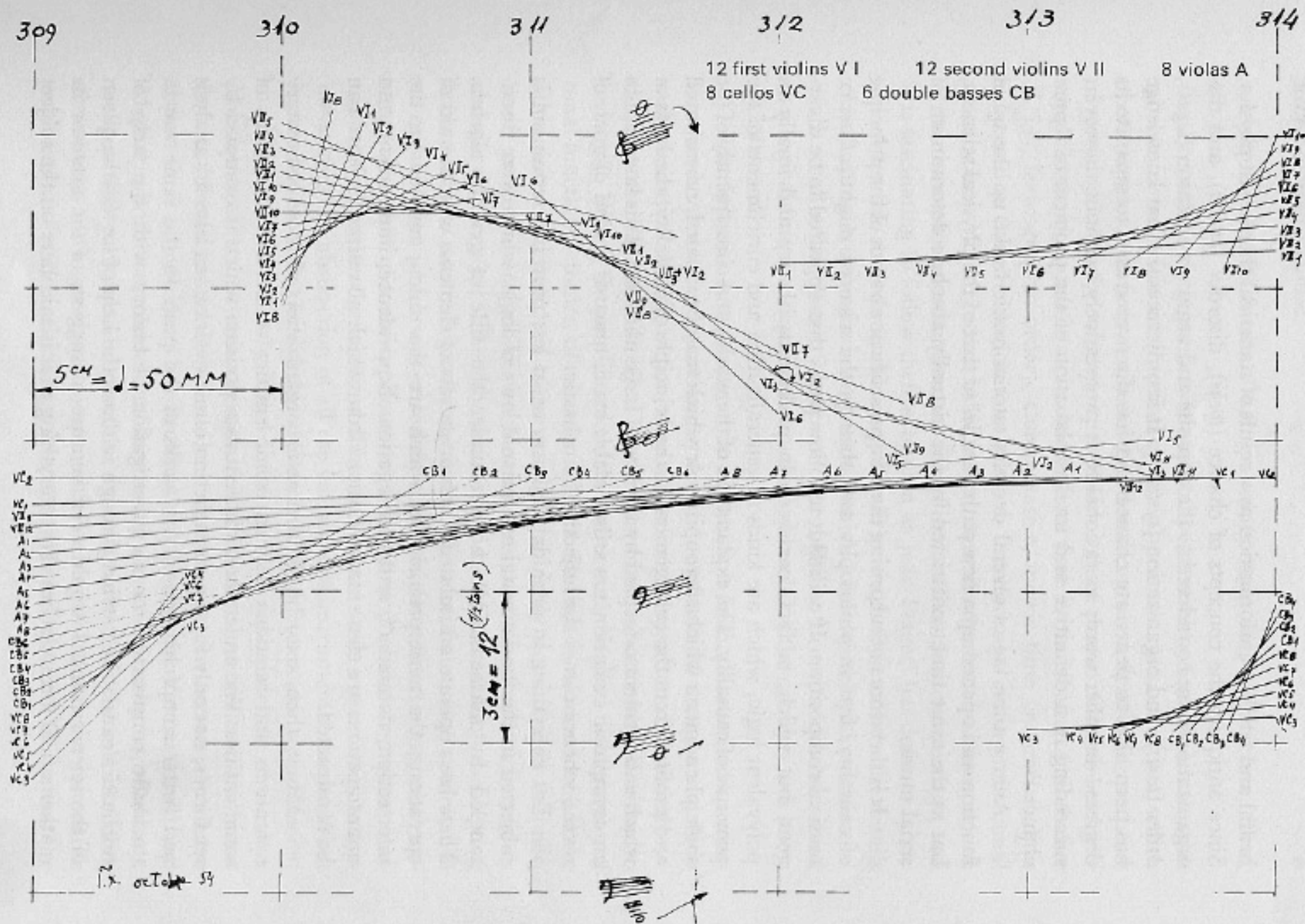
Schaeffer

- * Schaeffer's treatment of the Etudes differed radically from the cinematic approach to 'found sound' in that he developed and modified the sonic material as if they were abstract musical resources and it is because of this that Schaeffer is generally acknowledged as the originator of the electronic music compositional method, rather than John Cage.
- * There are three factors of innovation for which the Etudes are generally acknowledged.
 - * Most of the sound sources were (except piano improvisations of Pierre Boulez) real-world non-musical sources.
 - * The compositions was inherently linked with the technology available. It would have been impossible to achieve at an earlier point in history and the technology was integral to the concept.
 - * The composition was also the performance and would always be the performance as it existed only on tape for reproduction at any time. Unlike Stockhausen's work, with detailed minimum performance instructions, Schaeffer considered the playback of the recording to be an adequate description of 'performance'.

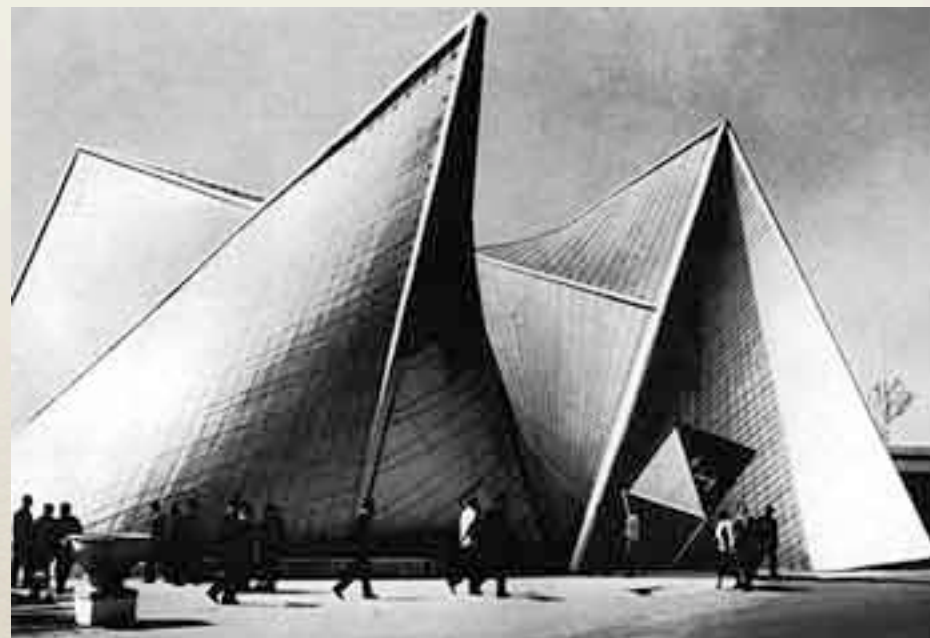
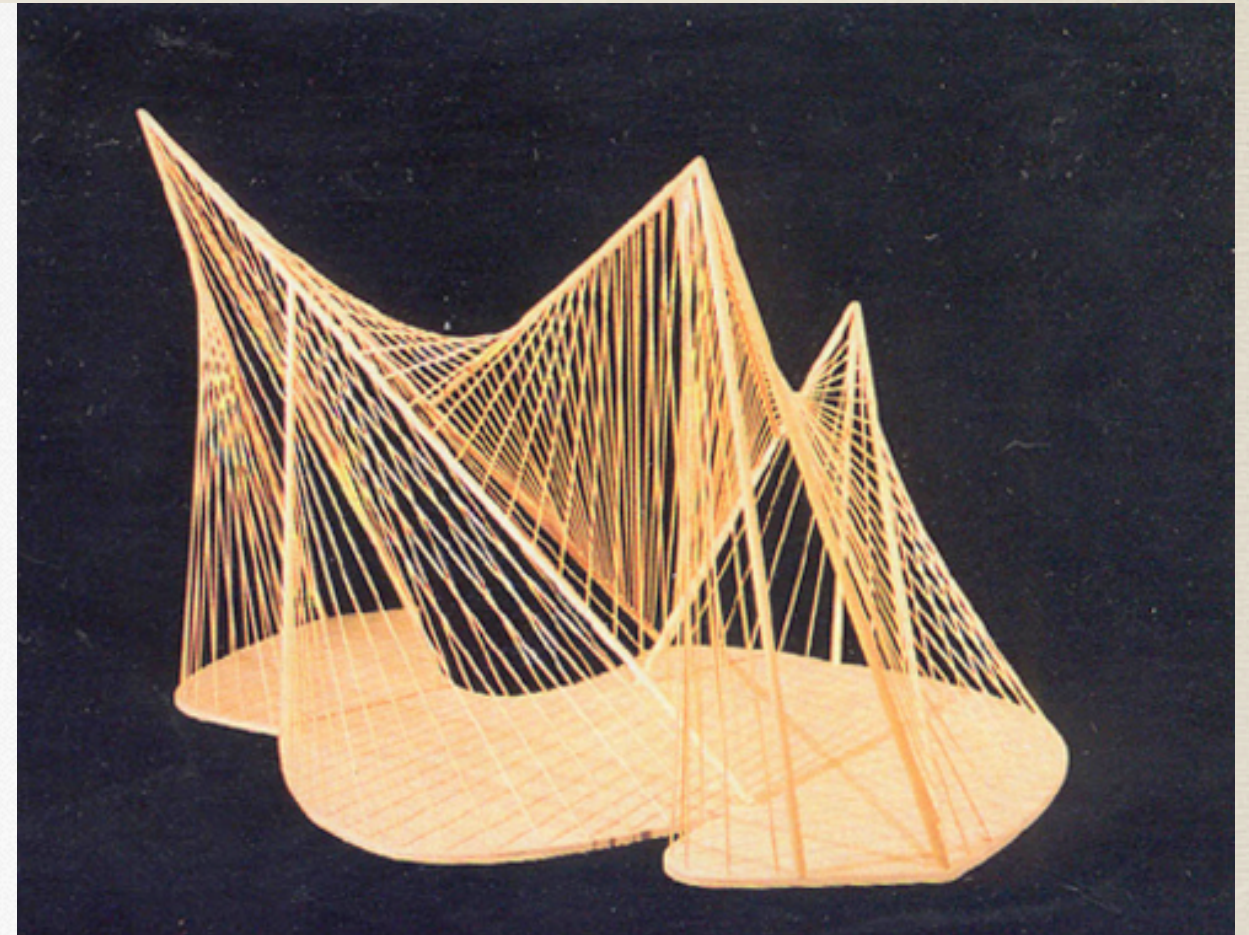
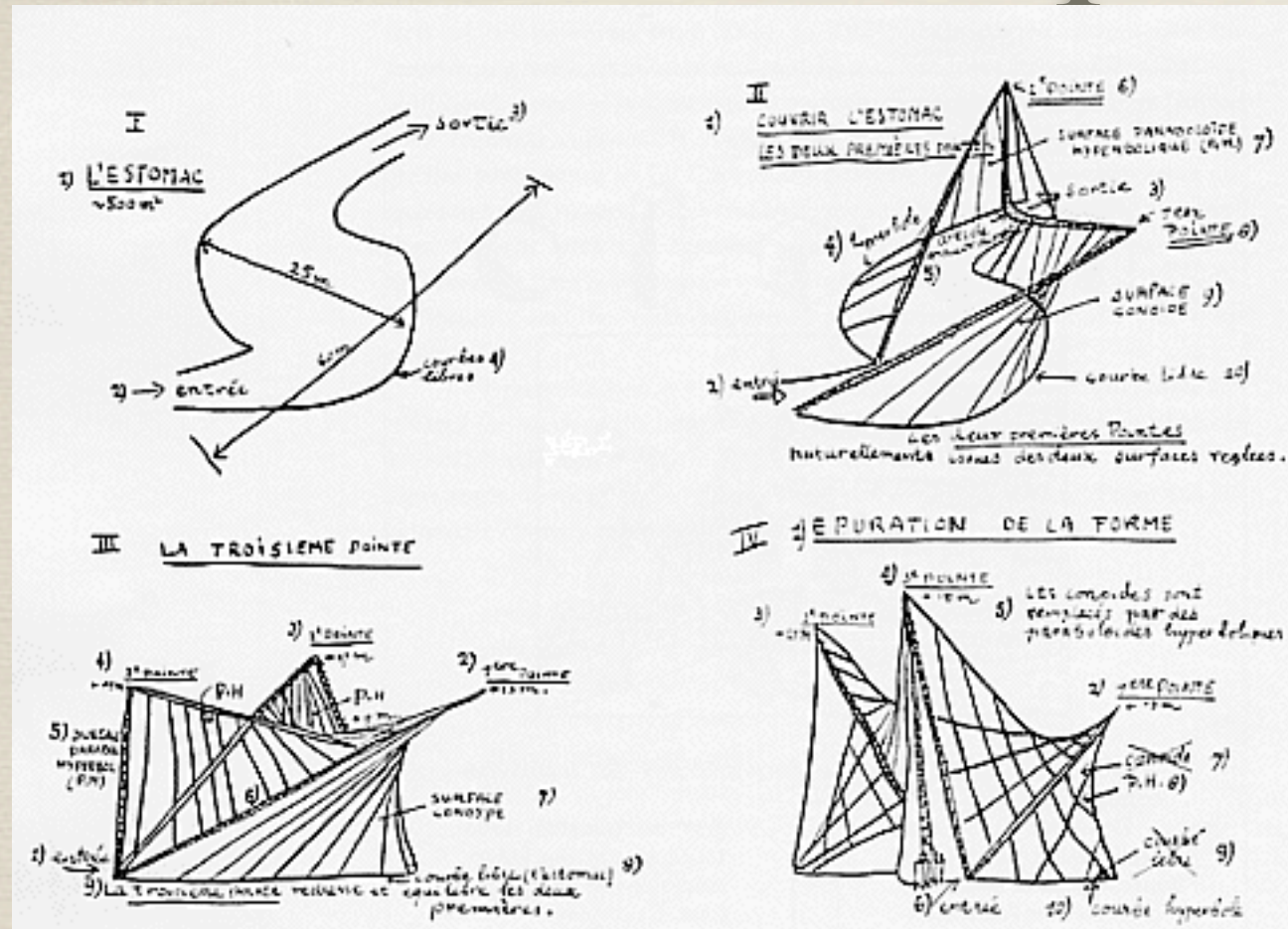
- * Some of the composers that would begin creating works of Musique Concrete at the RTF studio would be Pierre Henry, Luc Ferrari, Iannis Xenakis and Oliver Messiaen, who brought along his students Karlheinz Stockhausen and Pierre Boulez.
- * Xenakis in particular produced several important works using classic musique concrete techniques such as manipulating sounds by varying tape speed or playing sounds backwards.

Iannis Xenakis

- * Most of Xenakis work uses sounds not typically considered 'musical'.
- * In Diamorphoses II, he uses what he refers to as 'ugly sounds', such as jet plane sounds, crashing cars and earthquakes.
- * In Concrete PH II, he uses sounds of burning charcoal.



Phillips Pavilion



Luciano Berio

Thema (Omaggio a Joyce) (1958 - 59)

- * Only sound source is the voice of Cathy Berberian reading from the beginning of the eleventh chapter of Ulysses.
- * Berio created motion between three general categories of sound:
 - * discontinuous (separated)
 - * periodic (repetitions)
 - * continuous (e.g. prolonged 's' sonority)
- * Berio creates a continuous metamorphosis between speech and music

Toru Takemitsu

Water Music (1960)

- * The piece is made up of sounds of water drops.
- * “I must express my deep and sincere gratitude to John Cage. The reason for this is that in my own life, in my own development, for a long period I struggled to avoid being "Japanese", to avoid "Japanese" qualities. It was largely through my contact with John Cage that I came to recognize the value of my own tradition.”

Steve Reich

Its Gonna Rain (1965)

- * In 1965 Reich composed *Its Gonna Rain*, which used a recording of a preacher, preaching about the Flood. Reich was impressed with the musical quality of his voice and so made tape loops of short sections of his sermon. He extracted the words “its gonna rain” and made a tape loop of this material.
- * Reich lined up identical tape loops and two tape recorders, but could not get them to play at the same rate and so got a phasing effect.
- * This work demonstrated the close relationship between musical ideas, technical resources and compositional theory in electroacoustic music.
- * It is fair to say that technology partially dictates the compositional procedures, aesthetics and theories.

Vladimir Ussachevsky

Of Wood and Brass (1965)

- * Composed in four sections, each section using different material
 - * first section uses trombone and an oscillator
 - * second section uses trumpet sounds
 - * third section uses xylophone and ring modulation
 - * fourth section uses trombone and Korean gong sounds
- * Ussachevsky attempts to remove the original context of the sound source. There is little resemblance to the instruments used to create the sound.

Francois Bayle

L'Oiseau-chanteur (The Songbird)(1963)

- * From Instrumental Sources
- * French horn, oboe and harpsichord to produce short phrases.
- * Sounds are extended by electronic means, but are not directly manipulated.

Alvin Lucier

I am sitting in a room (1969)

- * Minimal use of tape manipulations
- * A brief statement recorded on tape and played back through loudspeakers into a room and rerecorded using a microphone onto a second tape recorder. This process is repeated 15 times.

Implications of Musique Concrete

- * Expansion of our conception of what constitutes a musically meaningful sonic event.
- * Ability to aestheticise natural or non-musical sounds.
- * Entire world of sound was placed at our fingertips (through technological innovation)
- * (Cage) Any sound or sonic environment, in order to be music, need merely be framed as such by the listening imagination.

America

- * Louis and Bebe Barron established a small commercial studio in New York. This may have been the first electronic music studio in America.
- * They composed several electronic film scores, most notably, the 1956 film *Forbidden Planet*.
- * They worked with Cage in 1951. Cage was interested in exploring ways tape recorders could be used in composing music. He started the 'Project for Music for Magnetic Tape', with the Barrons, Earle Brown, Morton Feldman, David Tudor and Christian Wolff.



Christian Wolff, Earle Brown, John Cage & Morton Feldman

- * Cage assigned the Barrons a task of recording as many sounds in a number of different sound categories, essentially a sound library from which he could then assemble his piece. This involved pushing the recording equipment to its limitations as the technology of that time was not easily portable.
- * The sound categories Cage wanted were:
 1. City sounds
 2. Country sounds
 3. Electronic Sounds
 4. Manually produced sounds
 5. wind produced sounds
 6. Small sounds needing amplification

Williams Mix

- * Cage cut the tapes into short pieces, then flipped coins (I Ching) to determine the order and also how to splice them. Cage and Brown finished Williams Mix, after about 9 months in total and after hundreds of splices.
- * Cage had a willingness to allow the edit or splice itself to become an integral element in the sound and therefore a sound object in its own right.
- * The Project for Music for Magnetic Tape was short lived, partially because the money ran out and because Cage moved on to other projects.
- * Works from this project
 - * Cage's Williams Mix
 - * Feldman's Intersection
 - * Brown's Octet I (created using left over tape fragments)

Columbia University

- * Vladimir Ussachevsky presented a concert in 1952 that included his first electronic composition which he had been developing for two years using a dual speed Ampex tape recorder and some custom made reverb circuitry.
- * Shortly afterwards he began working with American composer Otto Luening. They became the curators of the *Columbia Tape Music Centre*.



Columbia-Princeton Electronic Music Center (front l. to r. Milton Babbitt, Vladimir Ussachevsky & Otto Luening)

- * In 1952, Ussachevsky and Luening presented the first public concert of tape music in the United States.
- * They performed Ussachevsky's Sonic Contours and Luening's Invention in 12 notes, Low Speed, and Fantasy in Space.
- * In 1959 Ussachevsky, Luening and Princeton professor Milton Babbitt established the *Columbia-Princeton Electronic Music Centre*.

Centre's First Concert in 1961

- * Vladimir Ussachevsky *Creation-Prologue*
- * Bülent Arel Stereo *Electronic Music No. 1*
- * Halim El-Dabh *Leila and the Poet*
- * Milton Babbitt *Composition for Synthesizer*
- * Mario Davidovsky *Electronic Study #1*
- * Otto Luening *Gargoyles for Violin Solo and Synthesized Sound*
- * Charles Wuorinen *Symphonia Sacra*