



Construction

- 1: First, fold each sheet in half along the vertical axis.
- 2: Using a craft knife or scalpel, cut a horizontal slot along the centre dotted line of the first sheet. (pages 1/2/13/14)
- 3: Then cut along the dotted lines on all the other sheets. Make sure to cut to the very edges of the paper.
- 4: Stack the folded sheets in ascending order with the even numbers at the top. Curl the bottom half of the second page (pages 3/4/23/24).
- 5: Thread the curled page through the centre slot of the first page. Repeat this process with the third (pages 5/6/21/22), fourth (pages 7/8/19/20), fifth (pages 9/10/17/18) and sixth sheet (pages 11/12/15/16) with the even pages in ascending order.
- 6: When all the pages have been threaded through, check the pagination. Finally, fold the booklets in half along the horizontal axis.

DIFFUSION eBook format conceived & developed by ProboScis, a non profit organisation which researches, develops and facilitates creative innovation. An alternative to prevailing formats for ebooks and electronic publishing, ProboScis welcomes the free adoption and use of DIFFUSION by any third party without licence or royalty.



Edison in 1878 listed ten uses to which the phonograph could be applied. These included what would be described now as: as a dictaphone; talking books; teaching of elocution; preservation of languages; family records (including the last words of dying relatives); speaking clock; teaching purposes / records of lectures etc.; telephone answering machine; music boxes and toys; and the reproduction of music. Much of this list has since become manifest (at the time Edison overlooked the commercial potential of recorded music). Two dominant characteristics occur in this list, these being of speech and of preservation (archiving). Concerns regarding phonic creativity and representation were not so much marginalised but had not even been thought of.

The early pioneers of sound recording considered their projects having, "... the same aim as printing; they were designed to transform sound into writing, in other words, to achieve automatic stenography." Jacques Attali, *Noise, The Political Economy of Music*.

The original trademark of the Gramophone company was of an angel inscribing grooves on a disc with a quill: "the unmistakable physiognomy of an individual's unique voice; a procedure quite similar to hand written documents produced in a culture centred around writing. It was hardly a coincidence that in 1909 this trademark was retired in favour of the dog Nipper listening patiently to the mechanical voice of his master. The record had become mass medium – music's servant, not its initiator." Michael Glasmeier, "*Music of the Angels*" from *Broken Music*, Artists' Recordworks

Although the means to record sound separated what was heard from its source

Technologies around the time of, and those that followed the phonograph separated the means of production from the means of its dissemination. The still photographic camera developed as both the product *and* as the means of production. Size, cost and the mystique of professionalism have been contributory factors causing this separation. The making of photographs has been within the public domain since around the same time as the invention of the phonograph but portable audio-recorders have been widely available now for only about thirty years yet public use has essentially been limited to the copying of music from radio or disc.

Industrial society gradually introduced noise through powered machinery. As noise increased, the perceptual connection between the source of the sound, its identification and the reason for it became less precise.

Forward

If it can be heard, it can be said that: *what a sound is – is sound as object; what a sound is of – is sound as representation; what a sound is like – sound as description.*

Within noise, detailed perceptions can be learned when there is a perceived need. During war the sounds of enemy planes could be distinguished from one's allies.

ONE:

ROB GAWTHROP

DIFFUSION



This publication is designed to be freely available to download and print out. Under no circumstances should any version of this publication, whether print or electronic, be sold by any third party without prior permission in writing from the publisher.

ISBN: 1 901540 11 1
British Library Cataloguing-in-publication data: a catalogue record for this publication is available at the British Library

Proboscis gratefully acknowledges the support of the Arts Council of England and the CRD Research at the Royal College of Art in making DIFFUSION possible.

DIFFUSION Interaction design by:
Noel Douglas

DIFFUSION Print design by:
Nima Farlatoni (www.NMDesign.co.uk)
Paul Farrington (www.tonne.org.uk)

© Proboscis & Rob Gawthrop
First published by Proboscis in 2000.
All rights reserved.

Series Editors: Giles Lane & Catherine Williams
www.diffusion.org.uk

Rob Gawthrop
ONE

ROB GAWTHROP
POPTWAS
ONE:

REFERENCES

- Repeated Takes – Michael Chanan
No Sound is Innocent – Edwin Prevost
Noise Water Meat – Douglas Kahn
Remarks on Colour – Ludwig Wittgenstein
Experimental Music – Michael Nyman
The Four Fundamental Concepts of Psychoanalysis – Jacques Lacan
The Screaming Body – Stephen Barber
Simulations – Jean Baudrillard
Audio-Vision – Michel Chion
Listening Subjects – David Schwarz
The Acoustic Mirror – Kaja Silverman
Out of Time – Ed. Andrea Phillips
Noisegate Magazine
ISA98
Toot Festival – Hull Time Based Arts
The LMC Annual Festival of Experimental Music
Audible Light – Oxford Museum of Modern Art
The School of Sound
Hearing is Believing – University of Sunderland
Jo Millitt
Hayley Newman
Robert Worley
Andrew Drummond
Bob (Ruth) Levene

The foetus, immersed senseless except for hearing.

To start from the self, the body, the senses.

Experience could be described as a process or activity, between the self and external phenomena or events, through time: gained through the senses; recognised, decoded or interpreted; intellectually and emotionally.

The flux between self, control and perception; of experience: the beginning and ending of an experience, the memory of the experience: the construction of the event (opening/closing – starting/ending)

"The light of speed illuminates the world and all its matter in the very instant in which it offers up its representation. But this is a representation for which the violence of its fusion and the power of its emission have replaced the course of the sun from dawn to dusk."

Temporally is located in the self (in one's own time) it is simultaneously located externally from, but in relation to, the self in a number of interrelated ways that include: being located within another person; by the movement and effects of the stars, planets, sun & moon; through an agreed measuring system; and by the marked duration of events.

Beginning, *A priori*, Birth, Formation, Construction.

(I)

()1

"The world is all that is the case."

Tractatus Logico Philosophicus, Ludwig Wittgenstein

"At the outset of the study of perception, we find in language the notion of sensation, which seems immediate and obvious."

Phenomenology of Perception, M. Merleau-Ponty

"It is at work everywhere, functioning smoothly at times, at other times in fits and starts. It breathes, it heats, it eats. It shits and fucks. What a mistake to have ever said the id. Everything it is machines – real ones, not figurative ones: machines driving other machines, machines being driven by other machines, with all the necessary couplings and connections."

Anti-Oedipus, Gilles Deleuze and Felix Guattari

"The entire life of societies in which modern conditions of production reign announces itself as an immense accumulation of spectacles. Everything that was directly lived has moved away into a representation."

Society of the Spectacle, Guy Debord

"For twenty five centuries, Western knowledge has tried to look upon the world. It has failed to understand that the world is not for the beholding. It is for hearing. It is not legible, but audible."

Noise, Jacques Attali

"It is self evident that nothing concerning art is self-evident anymore, not its inner life, nor its relation to the world, not even its right to exist."

Aesthetic Theory, Theodor Adorno

that technology is involved.

Peter Bosch & Simone Simon's installation *Krachtgever* used computers to shake a wall of crates, filled with wood, glass, metal etc., on springs to produce noises that moved from one end of the wall to another, loudly and softly without any sound reinforcement.

Lone-Twin's work in progress *The Days of the Sledgehammer Have Gone* included an absurd rain-dance in waterproof walking gear, a live recitation of a list of rivers from distant parts of the UK via a telephone, and the dripping of water pumped from a nearby river into the gallery.

Hayley Newman's performance *Soundgaze* reconstructs from the acoustic commentary on what we see. We know that it is being performed and we know apparently produces the sound we hear or the sound is an abstract or literal by using objects and their sound-samples on bathroom scales. We see what as an active process except when the need for expression takes precedence.

European free improvisation explores the conditions of making and listening to acoustics, technology and audience.

Terry Riley, Tony Conrad, Pauline Oliveros and Charlemagne Palestine have and continue to use evolving compositions that are self-reflexive and respond and use of biographical references may be seen as a retrogressive move.

The early work of Phillip Glass & Steve Reich exposed the means of making over after the piano eats or decides not to." (October 1960)

If the former, the piece is over after the piano has been fed. If the latter, it is and drink. The performer may then feed the piano or leave it to eat by itself.

"Bring a bale of hay and a bucket of water onto the stage for the piano to eat LaMonte Young's *Piano Piece for David Tudor #1*

Brecht, Yoko Ono etc.) present a paradox in that alternative versions may be present; some or all may well be impossible. The audience is placed in a position of simultaneous action and reflexivity even if this is the form of work – of termination.

Fluxus musical scores (LaMonte Young's *Piano Piece* and others by George

work – of termination.

questioning one's own position ("what am I doing here?") and rejecting the

present; some or all may well be impossible. The audience is placed in a

position of simultaneous action and reflexivity even if this is the form of

work – of termination.

Fluxus musical scores (LaMonte Young's *Piano Piece* and others by George

work – of termination.

questioning one's own position ("what am I doing here?") and rejecting the

present; some or all may well be impossible. The audience is placed in a

position of simultaneous action and reflexivity even if this is the form of

work – of termination.

Prologue

As one with the Mother.

At birth: separation, pain, being touched, tasting, smelling.

Emissions: utterance, defecation.

Of the self but not the self.

Familiar sensations: smells, sounds and warmth.

New sensations: light and taste.

The validation of *things* in the world can only be through the senses, we have to accept what we see, hear, touch and taste for the world to make sense.

Self, the world, and language are formed through the senses. All of the senses. Sensory experience, of *feeling*, *taste*, *being moved* and of *being touched*. The confirmation of being, the real.

In psychoanalytical terms *the real* as the *first encounter*, of being woken-up. Beyond representation and outside of language; of excess, the abject and the sublime.

"Consciousness comes into being at the site of a memory trace."

Freud quoted by Walter Benjamin in *Illuminations*

There is a dominant tendency to describe not just that which is produced as a product but any *output* that has an exchange or potential exchange value. The concept of value is not fixed but is reached through consensus, negotiation or war. For a majority to give consent then the *representation* of value must have authority and be *convincing*. This is essentially a confidence (or magic)

Albert Camus, *The Rebel*

"The society based on production is only productive not creative."

relationship with the work is reduced to one of illusory value and exchange. and, by implication, owned. The receiver becomes the consumer and the The maker becomes the producer who in turn may be managed, controlled are separate from the work then the recipient is alienated from the maker.

If the means of making and presenting work is integral to the receiving of the work then there is a tangible (conceptual, perceptual) relationship between the recipient and the maker. If the means of making and presenting the work

Manager / Conductor / Controller (Author / Artist / Performer / Presenter) –

managed, conducted or controlled. The power relationship between: the

organised then it could be said that the constituent parts have been

if anything (creative / cultural / artistic / musical / performic etc.) is

or oppressive (production, conversion, propagation);

participatory); consensual (conscious or unconscious agreement between);

Viewer / Listener – – – the work; and Audience

maker: the managed / conducted / controlled / controlled / controlled / controlled

composed but 4'33" shifted the emphasis to listening and simultaneously affirmed the performic.

The performic aspect of music has many antecedents (apart from ritual music and traditional songs) that include the use of cannons and fireworks in certain orchestral works (to create a good noise); the introduction of African musicianship into British military music in the Eighteenth century: "...military bands utilised a fantastic number of percussionists – sometimes one-third of the band – to the imbalance of the music." Amon Saba Saakana, "Culture, Concept, aesthetics: the phenomenon of the African musical universe in Western musical culture", in *The Last Post: music after modernism*. George Antei's live accompaniment to Ferdinand Leger's *Ballet Mecanique* complete with aircraft engine; and *The Symphony of Sirens* conducted with giant flags from rooftops by Arseni Avraamov.

Eric Satie's *Vexations* (1893) requires the pianist to play a one-and-a-half-minute motif eight-hundred-and-forty times. The piece would last over 18 hours. This was first played under John Cage's direction in 1963 by a team of pianists. It has been considered that *Vexations* should be played by just one pianist, this was attempted by Reibert De Leeuw but was curtailed after 117 times by the necessity for the Hall to be closed.

In Cage's famous aphorism (from *Silence*), "In Zen they say: If something is boring after two minutes, try it for four. If still boring, try it for eight, sixteen, thirty-two, and so on. Eventually one discovers that it's not boring at all but very interesting."

trick that is dependent upon the style and panache of the perpetrators and the gullibility of the recipients. This representation itself serves ideology as it denotes a power relation as though normal, acceptable – common sense.

Louis Althusser, in *Ideology and Ideological State Apparatuses*, presents the proposition that if a person or persons are hailed (interpellation) then they have been transformed into subjects. This automatically sets up a power relationship especially if the interpellator also has a position of power i.e. through status, knowledge etc. (Althusser's example was of a policeman calling "hey you there"). The most likely form of hailing would be aural (although a visual indicator may be possible). Broadcasters use all manner of sounds to draw attention to the commencement of programmes and to emphasise importance.

"The role of the refrain has often been emphasised: it is territorial, a territorial assemblage. Bird songs: the bird sings to mark its territory... Colours do not move a people. Flags can do nothing without trumpets... The refrain is sonorous par excellence, but it can as easily develop its force into a sickly sweet ditty as into the purist motif... Beethoven used as a signature tune. The potential fascism of music." *A Thousand Plateaus*, Gilles Deleuze & Félix Guattari.

Sound-bites, 'alert' sounds, call signs and jingles are the nearest audio equivalent to a filmic shot or frame. These operate as encapsulated signs or signatures. They serve as commands, refrains, statements of ownership (territory) and as such operate ideologically.

John Cage's premise that silence separates one section of a composition from another was called into question by his own composition 4'33" where its 'beginning and end' is denoted both aurally and visually by the opening and closing of a piano lid. John Cage was concerned with *how* music is

The following inform (usually negatively and without thinking) most forms of aural culture where the understandability of what is being said (diction) is foregrounded: Regional accents (class); Cultural differences (racial); sexuality (gendered); and authoritative power (patriarchal). Such unthinking is perpetuated wherever there is the spoken word. There is a contradiction between the meaning of the voice (unintelligible accents) and of being able to understand what is being said, nevertheless it should be possible for the listener to learn.

In Michel Chion's book *The Voice in Cinema*, Chion describes the exclusion of certain actors from parts in the emerging *talkies*, because of the quality of their voices. The *King's English* was required for British radio broadcast both nationally and for the World Service (London Calling).

In Idrissa Ouédraogo's 1989 film *Yaba*, the use of quietness accentuates the meaningfulness of sound in relation to both the activities portrayed in the film and of physical space. Every sound has both meaning and aesthetic resonance. The conventional use of a music *soundtrack* to open and close certain scenes (by Francis Bebe) served to reinforce difference in its obtusion. An equivalent Hollywood film uses layers of speech, music, effects, *atmosphere* to prevent listening. Sound being used for its emotional and dramatic impact as a means to support a narrative which in itself is expressed through spoken or signified language. The responses of the viewer/listener being essentially predetermined.

The *Classical* domination of equal temperament, developed (or was liberated) from Pythagoras after *The Enlightenment*. This enabled (mathematical and predictable) systemisation (Orchestral Music, keyboard and fixed tunings) and domination.

Music is an appropriate term to cover an aural cultural practice defined as the *organisation of audible and inaudible material*. However, for most people music has become pre-defined and is used specifically to describe harmony, tune and rhythm using musical *instruments* and voice.

Aurally may be perceived as a riposte to visually. As audio-visual media have developed through the twentieth century much common language usage has become inadequate, inappropriate or misleading. Visual art for example cannot refer to any time-based art-form as *nothing temporal can be silent*. If time-based work is considered a *visual art* then the aural is marginalised.

Preface

Music that is idiomatic; that is music of a certain type, style, or is associated with particular social/cultural (sub) groupings; can be recognised by the characteristics that such idioms may be associated with. Technology allows anything that has been recorded to be accessed. Idiomatic musics are culturally and ideologically encoded sound sources that may be (re)used (albeit unconsciously) for those very reasons.

When large distances separate a performer from the listener/viewer, synchronisation can only be assumed or imagined. When video projections enlarge the action or relay the visual information closer to the viewer synchronisation is perceived, it being live is assumed through comparison. Electronic treatments of sound compensate for the distance and the discrepancy between the speed of sound through air and of sound/picture as electromagnetic radiation (through a line voltage, radio waves or light).

The communication and entertainment industries continually silence or make invisible the means or methods of illusion.

The music industry continues the process of attempting to recreate with as much accuracy and fidelity as possible – the perfect concert in your living room. This is despite the range of acoustic spaces and audio equipment that people will be experiencing the music in and with. This quest can be explained (excused?) as being for: technical research; creative research; or economic gain.

1

Dziga Vertov's 1931 film *Enthusiasm* used location recordings of natural sounds, music and noise and edited both sound and image synchronously and disjunctively.

Through careful listening it can be possible to recognise that the sound in question is being produced by a loudspeaker. The problem can be compounded when the loudspeaker is part of a public-address or sound reinforcement system. Normally, when in a performic situation, the P.A. system is set-up to be unobtrusive, the illusion is that of the person / instrument / thing is producing all of the sound but louder. When public address systems are used as information sources, such as at railway stations, it is not known if the voice is live or pre-recorded. It is unlikely that many people could detect such a difference through listening alone.

Loudspeakers are an issue in that they are objects that exist in a space, are disguised or hidden. Along with audio recording loudspeakers have normalised the acoustic experience. Knowledge of what a sound is and the potential looking. In the case of unexpected sounds this happens without choice.

Much contemporary art makes use of what is called installation. Gallery spaces are rendered neutral to avoid visual distractions, however aural neutrality is the exception rather than the norm. The suspension of use of our perceptual faculties is necessary for the reading of exhibits. Noise and conversations are ignored when viewing. Loudspeakers, microphones and people are ignored when listening. Artists and curators should be concerned with the site-specificity of the gallery when dealing with audio-visual installative work. There was a time not long ago when sculptures were placed on plinths seemingly without any perceptual disturbance.

Introduction

"...a *harmonious* esoteric master-order which is set in rigid opposition to Greek democracy. For this purpose, the ideal of *cosmic harmony* (in effect a larger and universalizing Order which transcends all human agency) was invented – and music was made the linchpin in Pythagorean idealism."

and, "... Pythagoras has to have *The Music of the Spheres* which only he can hear... What a load of crap."

Tony Conrad, sleeve notes from CD *Slapping Pythagoras*.

Traditions derived from *the natural world* : of imitation, representation and being; of work and movement; of communication; have been modified through class, patriarchal, religious and imperial domination and are continually being modified by technological developments through the means of production, reproduction and distribution of music globally. Ever towards homogeneity and away from the celebration of difference.

Classical concepts of (astronomical) time developed from Aristotle and recently taken to its logical conclusion of Beats Per Minute using digital technology. Rhythm, one of the few preserves outside of classical influence, is in turn becoming homogenised through simplistic popular dance structures and computer technology.

In Olu Taiwo's presentation (with John Wood – "Clock Time & Consensual Time") at ISEA98 a generalised difference between *African* and *Western* perceptions of time and objects was illustrated by the description of an apple on the ground over a period of time. The western understanding being that the apple was there at the start but at the end of the period of time it was a rotten core; the African understanding being that the apple was gradually transformed. The western approach separates and objectifies – of naming. The African

We can emit sound, smell and heat of which only sound can we control. We cannot emit light.

All sounds are produced through actions, moments and things of change.

Pictures (cave paintings) have been made that have so far proved to be permanent.

Echo & Narcissus.

Before the invention of the phonograph no one had heard themselves before except through momentary echoes and reverberations.

A reflection in a puddle remains as long as it is looked at.

Prelude

To silence by noise and escape through the glitch.

It is outside of (western) traditional, classical and modernist concepts of music that music is able to challenge and develop, or... the future of music is not music.

It is possible to recognise the difference between the sound emitted from its source and its sound as emitted from a loudspeaker. The difference being produced by the effect of space, of acoustics of the source; and of that where the loudspeakers are placed, together with the effect of intervening processes (E.Q., mixing, compression).

Sound engineers seek to (re)produce sound indistinguishable from its source. Some sounds are now more commonly heard from speakers than from their original source to the extent that the source when heard is called in to question rather than its reproduction. Drums when live have a large dynamic range which require 'compression' for recording and replay.

Processes of recording sound (and music in particular) produce particular sound qualities. In music this quality is often distinctive, like a signature denoting the identity of the artist(s). As sound engineering developed so too did the role of the producer. An intention of sound recording was to render the process imperceptible. Producers, particularly Joe Meek and, perhaps more influentially, the Jamaican producers of Dub, allowed the sounds made through the technology of the recording studio to become essential parts of the music produced. These so-called technical flaws have become a particular aesthetic (albeit sometimes within a particular idiom). It can now be desirable to recreate hiss, crackle and rumble digitally through specially written programmes. And similarly in digital video to reproduce filmic scratches, dirt and video time-code errors.

Where there is movement there is sound. Not all sound is audible. A particular sound may be inaudible either because it is beyond the limits of our hearing or because other sounds dominate. Where there is stillness our auditory perception is heightened. We cannot close our ears, even when sleeping.

"John Cage stated that 'There is no such thing as silence. Something is always happening that makes a sound' Similarly there is no such thing as empty space. As long as a human eye is looking, there is always something to look at.... The Art of our time is noisy with appeals for silence." Susan Sontag, "Aesthetics of Silence" in *Styles of Radical Will*.

Any single object, as a representation in stasis, is temporally sited only in relation to those perceiving it and in its relationship to other objects. A narrative may only be formed by the perceiver's own creative imagination which is drawn from a lifetime of experience including the accumulation of knowledge of a multiplicity of objects which may have every conceivable relationship with each other. For an event to take place in *actuality* an action has to take place. An action will include movement, movement will create sound.

In pre-industrial society it was possible to recognise and distinguish anything that could be heard. Sound was produced by living things directly (voluntary or not) or as a consequence of the weather and other natural phenomena. Continuous sound (apart from running water, wind and inaudible atmospherics) has only existed since industrialisation.

Prior to the discovery of synthetic dyes and pigments colour was created naturally. A colour could have meaning in the sense that it was originally something and that something may also have had a smell. The creation of

An object or objects that are not in stasis can be recognised by the sound they make. What is important here is that although the sound may be used to identify the object or objects it also signifies an activity, changing circumstances, the potential of something that may impact upon the self.

A picture cannot be anything other than a picture irrespective of what it represents. As an object, it is named a *picture* the problems occur when it is described as *what* it represents.

"Objects can only be named, signs are their representative, I can only speak about them; I cannot put them into words."

Ludwig Wittgenstein, *Tractatus Logico Philosophicus*

The sound produced by late-twentieth century loudspeakers is both the sound of the loudspeaker and the sound of its original source, the sound waves are perceptually identical, this produces doubt as to any sound's authenticity. However, the reproduction of space and direction is less than convincing, the acoustics of the recorded or simulated space will rarely coincide with the acoustics of the space that the final result will be listened in.

"Without the loudspeaker, we would never have conquered Germany."

Adolf Hitler, 1938 – Manual of German Radio

(as did the telephone) it was not until electrical recording and the development of the loudspeaker that it became possible for the phonic source to be *indistinguishable* from the playback of its recording. It also enabled communal or mass listening.

Electromagnetic radiations picked up through radio-receivers have been described as *atmospherics*. Alvin Lucier recorded these as *Spherics* and more recently by Joe Banks (*Distortion*).

Air and space are necessary for sensing sound, smell and temperature. The combination of which, together with visual stimuli, give information regarding what has been what is and what is to come. Distance, wind or movement of air and acoustics all playing their part. The simultaneity of such experience may produce emotional responses sometimes objectified as an *atmosphere* or aesthetically as being *atmospheric*.

Faults in engines are usually identified aurally before any visual sign.

Imperfections of the body may be heard: heartbeats, wheezing etc. – Prior to x-rays, listening to the body was the only means of diagnosis.

Objects and materials of uniform shapes (metal glass pottery wood etc.) make particular sounds when struck and produce particular harmonic structures, imperfections can be heard: a bowl will not ring if it has a crack. Wheel tappers were employed by railways for the same reason. There is a direct correlation between an object's shape and its sound. (received)

Aesthetics of sight and sound.

Additional colours through mixing was more in the province of alchemy where changes could be brought about chemically where a substance would be affected by acid or alkali reaction (indicators, the litmus test). Colour had value in that some pigments would be rare and others commonplace.