#### THRESHOLD

POSITION YOURSELF VERY CLOSE IN FRONT OF A LOUDSPEAKER BARELY TOUCHING IT. THE LOUDSPEAKER IS CONNECTED TO A TONE GENERATOR.

A TECHNICIAN ACTIVATES THE SOUND SYSTEM AND SETS THE TONE GENERATOR TO A CERTAIN FREQUENCY AND VOLUME.

YOU START TO TAKE DISTANCE FROM THE LOUDSPEAKER AND MOVE AWAY AS MUCH AS POSSIBLE WITHOUT LOSING CONTACT WITH THE TONE.

STOP WHEN YOU CAN NO LONGER PERCEIVE THE TONE. AT THAT POINT, MAKE SURE YOU ARE NO LONGER PERCEIVING ANYTHING AND ACT ACCORDINGLY:

A) IN CASE OF NOT HEARING THE TONE YOU MOVE CLOSER TO THE LOUDSPEAKER.

B) IN CASE THE TONE IS STILL PERCEPTIBLE YOU CONTINUE TO TAKE DISTANCE.

THE TECHNICIAN ENDS THE PIECE BY SLOWLY LOWERING THE VOLUME TO ITS MINIMUM AS IF HE IS CALLING YOU BACK TOWARDS THE LOUDSPEAKER SO THAT YOU ARE BOTH CLOSE TO EACH OTHER AGAIN.

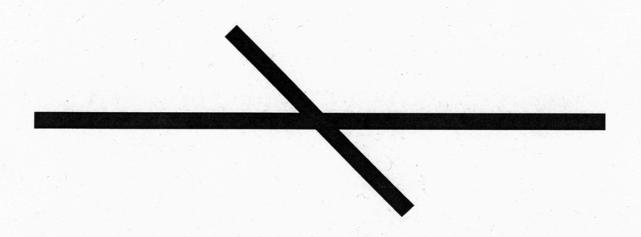
ANY AUDIENCE MAY OBSERVE YOU FROM BEHIND THE LOUD-SPEAKER.

Before beginning the piece you can do a test and choose what frequency works best for you and the context.

The technician can "adjust" your distance by changing the volume. If he raises the volume, you will have to move further; if he lowers it, you will have to move closer.

Everything happening around you transforms your perception of the tone, masking, covering and cutting it. Therefore, you have to modulate your distance in relation not only to the volume of the tone but also to what's around you. For example, if a car drives past, you should probably come closer to the loudspeaker. Or if there is a general drop in intensity you should take distance, certain that you will be able to maintain contact with the tone even from a long distance.

#### BALANCE



TWO LOUDSPEAKERS ARE POSITIONED OPPOSITE EACH OTHER AT A CERTAIN DISTANCE. EACH LOUDSPEAKER IS CONNECTED TO A TONE GENERATOR.

POSITION YOURSELF AT A POINT ON THE IMAGINARY LINE THAT CONNECTS THE TWO LOUDSPEAKERS.

TWO TECHNICIANS SIMULTANEOUSLY ACTIVATE THE SOUND SYSTEMS AND SET THE TONE GENERATORS TO DIFFERENT FREQUENCIES AND DIFFERENT VOLUMES.

YOU BEGIN TO MOVE IN SPACE AND SEARCH FOR THE SPOT WHERE YOU PERCEIVE THE TWO TONES AT EQUAL LOUDNESS.

ONCE YOU HAVE LOCATED THE SPOT, THE TECHNICIANS CHANGE THE VOLUME OF TONES SO THAT YOU START TO MOVE AGAIN SEARCHING FOR THE NEW SPOT.

THE TECHNICIANS END THE PIECE BY SLOWLY LOWERING THE VOL-UMES AND MINIMIZING THE SOUNDS LEAVING YOU ABSENT OF ANY SOUNDS TO REFERENCE AND BALANCE.

ANY AUDIENCE MAY OBSERVE YOU FROM THE PERIMETER OF WHERE THE ACTION TAKES PLACE.

The technicians should be aware of the direction of the loudspeakers when positioning.

The technicians are active participants in the piece observing and responding to your movements.

In addition to making changes to the volume, the technicians may also change the directionality of the loudspeakers by slowly rotating them.

The point of balance is more punctual and clear within mid range frequencies (ex: 500 hz and 2000 hz)

With frequencies belonging to two different ranges (ex: 200 hz and 8000 hz) the point of balance becomes more indistinct and almost ubiquitous.

Phase fluctuations occuring as a result of the interaction between the two frequencies complicate the comparison process and make locating the spot of balance even more difficult and uncertain.

#### **FEEDBACK**

4

A MICROPHONE IS CONNECTED THROUGH A LONG CABLE TO A LOUDSPEAKER.

TAKE THE MICROPHONE IN YOUR HAND AND POSITION YOURSELF FAR AWAY FROM THE LOUDSPEAKER.

A TECHNICIAN ACTIVATES THE SOUND SYSTEM AND SETS THE LEVEL OF VOLUME. ONCE THE VOLUME IS SET, THE TECHNICIAN LEAVES THE CONTROL OF THE SYSTEM AND SIGNALS YOU TO BEGIN.

START WALKING TO THE LOUDSPEAKER. YOU HAVE TO REACH IT AND TURN IT OFF WITHOUT ANY SUDDEN FEEDBACK OCCURRING.

WORKING WITH THE DIRECTIONALITY OF THE MICROPHONE AND POSITIONING OF YOUR BODY, YOU TRY TO ANTICIPATE AND CONTROL THE FEEDBACK TO AVOID BEING STRUCK BY IT.

THE PIECE ENDS WHEN YOU REACH THE LOUDSPEAKER AND TURN IT OFF PREVENTING ANY FURTHER POSSIBILITY OF FEEDBACK ATTACK.

ANY AUDIENCE MAY OBSERVE YOU FROM THE PERIMETER OF WHERE THE ACTION TAKES PLACE AND BRAVE ONES CAN SIT NEXT TO THE LOUDSPEAKER.

Before you start the piece try to figure out how the sound system works so you can set it right without a sudden feedback destroying your ears.

Volume should be set where you can hear through the loudspeaker the sound of the microphone cable touching the floor.

A dynamic microphone works best.

If you work with a mixer you can also soften low frequencies and emphasize high ones.

Listen carefully for minuscule sounds coming from the loudspeaker so that you are able to anticipate any traces of feedback that may strike.

Feedback has no mercy, proceed with caution.

### BEAT TO THE BEAT



POSITION YOURSELF IN FRONT OF A LOUDSPEAKER HOLDING A PAINT BUCKET AND A DRUMSTICK. THE LOUDSPEAKER IS CONNECTED TO AN IMPULSE GENERATOR.

A TECHNICIAN ACTIVATES THE SOUND SYSTEM AND SETS THE IMPULSE GENERATOR TO A CERTAIN SOUND AT A CERTAIN TEMPO.

START BEATING THE PAINT BUCKET AND TRY TO FOLLOW THE IMPULSES FROM THE LOUDSPEAKER. BEAT ONE STRIKE FOR EACH IMPULSE.

AFTER BEATING A FEW STRIKES AND GETTING ACCUSTOMED WITH THE TEMPO, START WALKING AWAY FROM THE LOUDSPEAKER.

CONTINUE WALKING AWAY AND BEATING UP TO THE POINT WHERE YOU ARE NO LONGER TOGETHER WITH THE IMPULSES. THE SURROUND SOUND OVERCOMES IT. THE IMPULSES BECOME TOO BLURRED FOR YOU TO PERCEIVE AND EVERY STRIKE THAT YOU BEAT CONFUSES THE SITUATION EVEN WORSE AT WHICH POINT YOU STOP BEATING. STAND STILL AND WAIT FOR THE TECHNICIAN TO LOWER THE VOLUME OF THE IMPULSES.

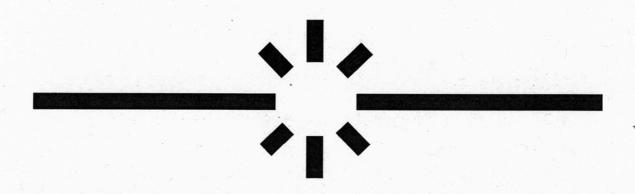
ANY AUDIENCE MAY OBSERVE YOU FROM BEHIND THE LOUD-SPEAKER.

When choosing an impulse to play back take into account its envelope, frequency content, and the way it interacts with space.

A good tempo that gives you enough time for breathing and listening is somewhere between 20 and 50 bpm.

While walking away you will probably have to change the intensity of the beating so that you are able to continue hearing the impulses from the loudspeaker.

#### BALLOON



LOOK FOR A LOCATION THAT YOU WANT TO LISTEN TO AND POSITION YOURSELF WITHIN THAT SPACE.

BLOW UP THE BALLOON.

ONCE THE BALLOON IS FULLY INFLATED STAND STILL AND WAIT UNTIL ANY SOUNDS IN THE ENVIRONMENT HAVE SUBSIDED.

POP THE BALLOON WHEN YOU DECIDE.

BE STILL AND LISTEN. PAY ATTENTION BOTH TO THE RESPONSE OF THE SPACE AND TO THE RESPONSE OF YOUR OWN BODY.

THE SOUND GENERATED BY THE POPPED BALLOON IS VERY AMBIGUOUS EXISTING SOMEWHERE BETWEEN SHOCK AND CONTEMPLATION, STUPOR AND FEAR, REVELATION AND TRAUMA, BEAUTY AND DISTURBANCE, ATTRACTION AND REPULSION. THE SOUND OF THE POPPED BALLOON HAPPENS IN A FRACTION OF A SECOND ACTIVATING THE ACOUSTICS OF THE SPACE THEN SUDDENLY DISAPPEARING LEAVING YOU IN A SUSPENDED STATE WITH TRACES OVER YOUR BODY, EARS, AND EMOTIONAL BEING.

ANY AUDIENCE MAY OBSERVE YOU FROM THE PERIMETER OF WHERE THE ACTION TAKES PLACE CHOOSING A SPECIFIC POSITION IN RELATION TO THE ARCHITECTURE AND TOPOGRAPHY OF THE SPACE. ANY POSITION ONE CHOOSES TO OCCUPY IS NOT NEUTRAL AND AFFECTS THE TRAJECTORY THAT THE SOUND TAKES TO REACH THEM. THE AUDIENCE IS FREE TO CHANGE THEIR INDIVIDUAL POSITIONS IF THE PERFORMANCE IS REPEATED.

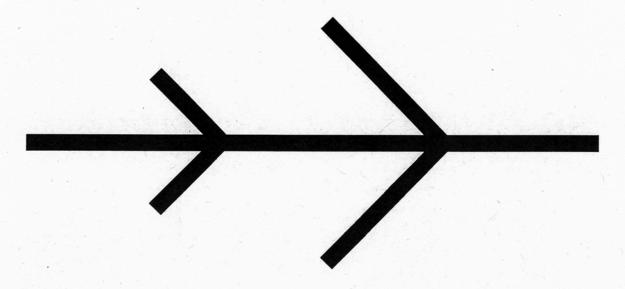
When blowing up the ballon listen to the tempo of your breaths inhalation and exhalation.

Waiting for the right quiet moment to pop the balloon may take some time as there are usually lower sounds arising unexpectedly in your aural perception of the environment.

Hold your breathe or exhale when popping the balloon. This will better enable your body to merge with the action without tension.

Pops, like any other kind of sound impulses, are a very difficult material to work with because they hit and run. They can be extremely tiring and fatigue one's listening. The sudden change of dynamic weakens the equilibrium of your emotional being and compromises your balance of energy. Like being exposed to a machine gun, pops are too short and loud for you to comprehend. Do not abuse them and protect yourself.

# FOLLOW THE ECHO



POSITION YOURSELF WITHIN A SPACE HOLDING A PAINT BUCKET AND A DRUMSTICK.

START WALKING AND BEATING SINGLE STRIKES ON THE PAINT BUCKET AT REGULAR INTERVALS IN RHYTHM WITH THE PACE OF YOUR FOOTSTEPS. FOCUS ON HOW THE STRIKES PROPAGATE SOUNDS IN SPACE AND GENERATE ECHOES.

IF YOU HEAR AN ECHO, WALK TOWARDS IT. ONCE YOU REACH THE SURFACE THAT GENERATED THE ECHO BEAT THE PAINT BUCKET AGAIN AND MOVE TOWARDS THE NEW ECHO.

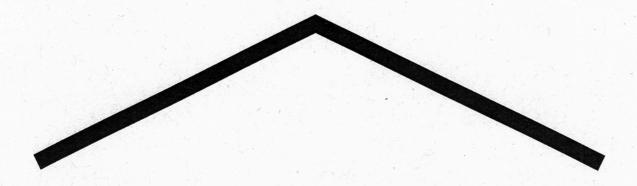
CONTINUE LIKE THIS STRIKING THE PAINT BUCKET AND FOLLOW-ING THE ECHOES AS IF YOU WERE BEING LEAD BY THEM. THE SOUND REFLECTIONS INFORM YOU WHERE TO GO AND GUIDE YOUR PATH.

IF YOU DON'T GET AN ECHO OR GET STUCK IN A DEAD SPOT LOOP-ING BACK AND FORTH IN THE SAME LOCATION, STOP AND CHANGE PLACE.

THE PIECE IS COMPLETED WHEN YOU HAVE WALKED ENOUGH TO FEEL SATISFIED OR NEED TO TAKE A BREAK.

Do not beat the paint bucket continuously without interruptions filling up the space with sounds. Be aware of the time before and after each strike.

### **ABSORPTION**



A LOUDSPEAKER IS PLACED HORIZONTALLY ON THE FLOOR AND IS CONNECTED TO A WHITE NOISE GENERATOR.

GATHER A COLLECTION OF VARIOUS MATERIALS RANGING IN SIZE, FEEL, THICKNESS, AND SHAPE.

POSITION YOURSELF CLOSE TO THE LOUDSPEAKER ONCE YOU HAVE GATHERED ALL THE MATERIALS.

A TECHNICIAN ACTIVATES THE SOUND SYSTEM AND SETS THE WHITE NOISE TO A CERTAIN VOLUME.

TAKE THE MATERIAL AND PLACE IT ON THE LOUDSPEAKER COVERING THE WHITE NOISE. AFTER A MOMENT OF OBSERVATION, CONTINUE LAYERING THE VARIOUS MATERIALS ON THE LOUDSPEAKER UNTIL THE WHITE NOISE IS COMPLETELY COVERED.

ONCE THE WHITE NOISE IS FULLY COVERED, THE TECHNICIAN PROGRESSIVELY LOWERS THE VOLUME. REACT BY REMOVING THE MATERIALS FROM THE LOUDSPEAKER AND TRY TO REGAIN THE SOUND.

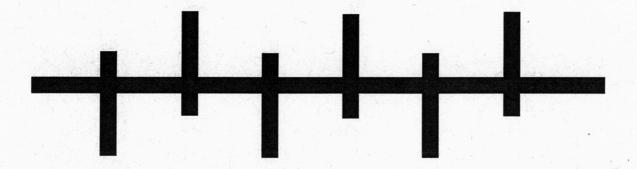
IF PERFORMED BY A GROUP, THE PIECE CAN PROGRESS WITH A DIFFERENT MATERIAL BEING PLACED ON THE LOUDSPEAKER BY ONE PARTICIPANT AT A TIME.

The selection of materials should be based on their sound absorbing properties.

During the process of placing and layering materials on the loudspeaker, it is interesting to observe how the sound, besides being filtered, is also transmitted through the actual materials. One may have the feeling that the sound is actually coming from the various materials and perceive them merging into a single animate being.

The change in the perception of loudness is accompanied by a moment of retuning where it is becomes unclear whether the white noise is still present or not. This ambiguity adds a sinister dimension to the piece. It is unsettling to not be able to perceive the presence of an entity that we know for certain is existing next to us.

## THROUGH THE FILTERS



A LOUDSPEAKER IS PLACED ON A STAND AND IS CONNECTED TO A WHITE NOISE GENERATOR. THE HEIGHT OF THE LOUDSPEAKER SHOULD BE EQUAL TO YOUR ABDOMEN WHEN STANDING.

POSITION YOURSELF OPPOSITE THE SPEAKER, IN LINE WITH IT, AND CLOSE YOUR EYES.

A NUMBER OF PERSONS POSITION THEMSELVES AT EQUAL DISTANCES IN LINE WITH, AND IN BETWEEN, THE LOUDSPEAKER AND YOURSELF. EACH OF THEM FACES THE LOUDSPEAKER.

THE OTHER PERSONS POSITION THEMSELVES STANDING IN A LINE BEHIND YOU AND OBSERVE THE ACTION.

A TECHNICIAN ACTIVATES THE SOUND SYSTEM AND SETS THE WHITE NOISE GENERATOR TO A CERTAIN VOLUME.

EACH OF THE PERSONS BETWEEN YOU AND THE LOUDSPEAKER BEGIN TO MOVE SIDEWAYS PERPENDICULAR TO THE SOUND PROJECTION. THEY MOVE INDIVIDUALLY AT A SLOW STEADY SPEED CROSSING ONE FOOT OVER THE OTHER AT A CONTINUOUS RATE WITHOUT STOPPING. THIS ACTION IS CONTINUALLY REPEATED FROM ONE SIDE OF THE SPACE TO THE OTHER.

WALK TOWARDS THE LOUDSPEAKER ALONG THE LINE WHERE THE PERSONS WERE STANDING KEEPING YOUR EYES CLOSED. YOU CAN SENSE IF THERE IS A PERSON IN FRONT OF YOU OR NOT BY LISTENING FOR THE CUTS THAT EACH OF THEIR BODIES PRODUCE WHEN INTERSECTING THE PROJECTION OF WHITE NOISE. IF YOU HEAR A CUT PRODUCED BY A BODY, WAIT UNTIL THE PERSON MOVES THEN STEP FORWARD AND CONTINUE APPROACHING THE LOUDSPEAKER UNTIL YOU REACH IT.

ONCE YOU'VE REACHED THE LOUDSPEAKER GET AS CLOSE AS POSSIBLE TO IT AND COMPLETELY CONQUER THE WHITE NOISE BY BLOCKING IT OUT WITH YOUR BODY.

The number of persons participating can be increased depending on the distance between yourself and the loudspeaker.

Your distance from the loudspeaker should be decided in relation to its loudness, directionality, and the acoustics of the space.

Bodies act as filters and make people's presence audible.

As you move away from the loudspeaker the projection of white noise becomes less directional and the body filtering less effective.

Better if you perform in a dry space or in a space with no walls so sound doesn't get reflected.