

The Listening Room and Stairwell

NTT InterCommunication Center (ICC)
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Japan

installation notebook

Wednesday 13aug03

Weather:

Minoru Hatanaka, ICC curator writes:
'last week big typhoon struck Japan.
in Tokyo it was very strong wind and rain.
so sometimes your installation made strange high frequency.
but now it is working very well.'

Monday 14jul03

Extremely wet - it has been raining for 24 hours now.

Last night's performance and talk seem to have been well received. The performance took place in the lobby, a strange but not uncomfortable experience of playing to the queue waiting to get in to see me.

Some people were there for my pop music past, others were there for the installations. I made the connection, took it forward and hope that it made sense. The first public reading of [the principles](#) - had to go through a printout of them with Reiko (translator) in advance as the vocabulary is arcane. The Principles are a work-in progress which attempt to rationalise guidelines and aspirations for my installations.

Talking through a translator in short sentences seemed to keep the flow and I had the sense that Reiko did a good job. Alvin Lucier said afterwards that the audience liked the asides (some of them were inadvertent).

This was followed by Alvin's talk and performance. He summarised his history as a composer or artist, gently revealing his discovery of the principles of his work (in contrast to my obscure manifesto), talking about how the innate systems of balance derived from the ecological or

physical world taught him to allow a process to take its natural course, not to force something on to or out of the work to enable the content and the process to be the same thing. A profound and generous non-intentionality.

The Gallery is closed today and Shinji and I are testing The Listening Room system. The air conditioning has been set to allow the room to reach 30c overnight but cold air is coming in from some other part of the system so the room is in fact comfortably cool and sounding well. The intricacies of the air flow system are beyond me. Echoes of [The Difference Room](#).

Shinji turned off extractor fans somewhere in the building, red lights flashed on the air conditioning control screen shortly to be followed by a visit from a building maintenance man who turned everything on again. We just sat there and tried to look innocent. It would seem this extreme testing is not officially sanctioned. It also seems we can only increase the temperature to the outside ambient temperature which is not much use today. So the decision is to set the air conditioning to keep the room at around 20 although this makes me concerned that this will create fluctuations rather than the steady-state environment which seems to suit the system.

I've been through the technical setup with Minoru and Shinji so they know what to do if it goes weird. The equipment will be photographed with printouts next to the mixers so that things can be reset.

Sunday 13jul03

Cooler and very wet today. Apparently hacker(s) had a go at the ICC server Friday night so it was inaccessible yesterday. Preparing for this evening's performance and talk, the first time I'll have done a talk with a translator. Trying to think in short sentences.

Documentation of The Listening Room with people in the installation this afternoon.

Unfortunately the presence of a camera and another microphone in the almost empty space confuses some viewers who tap the camera mic to see what it will do. The room is behaving but almost no high frequency content in the feedback. It seems to respond ok when there are as many as 8 people in the space, people are being quiet within the room and this helps. Yesterday there was a lot of microphone tapping - this is pointless as it shuts down the feedback cycle - I heard people clapping their hands in Alvin's installation.

Tomorrow we will run The Listening Room for a day with air conditioning set to some ridiculously high temperature as a test to see whether it can survive the full rigours of the Summer.

In the evening, a performance in the reception lobby of ICC followed by a talk upstairs in the Gallery.

Very slow guitar playing into the ProTools mixer delay system with the PA speakers spread around the space in odd positions and at odd angles so that I am playing into the room, working with the space. Played at about twice the volume that I soundchecked as I couldn't hear much from the room, masked by the audience. It didn't entirely go as I planned but still much better than playing on a stage.

A borrowed guitar from Minoru Hatanaka, a borrowed guitar strap from Haruhiko Goto and a photograph courtesy of Aki Shimatani, thanks very much.

Friday 11jul03

Both installations are behaving fairly consistently now. The Listening Room sounding better than yesterday now that the space is less busy. Some visitors are spending quite a long time in there.

Thursday 10jul03

The Listening Room has survived overnight, behaving consistently for about 14 hours since I completely reset the system and changed amplifiers. Minor tweaks this morning, adjusting high frequency input to try and let it become a little more harmonically rich. Need to test it with a lot of people in the space. The press view or private view which in London would be called an opening is this evening. Here an opening is when it opens to the public - that's tomorrow.

Waiting for Haruhiko with the replacement mic for the Stairwell.

12.30 - Severe HF feedback again, not as bad as yesterday - people are saying it is some factor to do with the building, the lifts affecting the humidity. Haruhiko returns with an Audio Technica Pro 43. This is a new one on me, not in the catalogue but presumably it has some relation to the 42 or 44. Somewhere in-between, probably omnidirectional (there is no manual either in Japanese or English). It goes on the wall in the stairwell, where, if it is omni, will respond better to the live space. Finally both installations are in place.

The Ramsa amp on the stairwell starts up from cold with a massive HF noise. I turned the mixer down and left the system to settle while getting on with speaker placement and soundcheck for Sunday downstairs in the lobby. By 3.30 the stairwell is up and running. Different with the new mic but interestingly and acceptably different.

The opening gets under way and finally this stuff is open to public scrutiny. The Listening Room has a history of not working at openings because there are too many people talking in the space. The noise makes the system shut down. Tonight is no exception, the piece sounds fairly dull but I expect it will come into its own when the gallery is operating normally and people aren't there just to socialise.

Wednesday 9jul03

A post-midnight check on the installation reveals it has reduced itself to a low drone - complete stasis.

I have left it running in that condition to see if it is behaving in a similar way later this morning. Alvin Lucier's 'Empty Vessels (Tokyo)' which is also real-time feedback based appears to have lost most high frequency content overnight. In this case this is down to the the fact that room is empty, the intervention of an individual within the work activates the work.

In this case the walk-thru intervention of Minoru Hatanaka (a curator's job can be a thankless late-night task) restores those parts that were absent from the beautiful chord I heard yesterday.

The Listening Room is still in stasis first thing in the morning. This is good in that the system appears to be stable, but it makes for very dull listening. More tuning and tweaking.

Around 2.00 this afternoon the system went into dramatically loud continuous high frequency feedback. So it is still unstable. My solution is to change the amplifiers. This morning Haruhiko temporarily swapped amplifiers on one channel of the Stairwell and it sounded very poor on the new amp, a Ramsa, the same as is in this version of The Listening Room. My current theory is that these Ramsas have some kind of built-in protection system and they don't like sine waves or feedback. So now the two installations have exchanged amplifiers. Stairwell was fairly easy to re-set, but it's back to square one with The Listening Room. Which has been the case every day as the system was so unstable. The new amps have improved things somewhat but another overnight test for stability is required. If it is still unstable I'll have to swap mixers tomorrow. I also decided either to replace the mic with a more omnidirectional type or to add another Audio Technica Pro 42 to broaden the soundfield in the hope that I could get more harmonics into the situation. At the moment it's mostly a monophonic approximation of what should be a polyphony.

An Audio Technica Pro 42 from the Stairwell is now in place in The Listening Room. The system appears to be stable and harmonically more interesting, a rather feeble chord is sounding when the room is empty, but the presence of people in the space is creating additional harmonics and modulation. Again, on test all night, so a late one for me. If it is still behaving tomorrow morning that will reassure me that the installation will survive the exhibition. What I want is a really hot sunny day just in case the the heat on the mics makes a difference.

Haruhiko is to go in search of a replacement mic for the Stairwell first thing.

Tuesday 8jul03

A very dull, grey morning. Setting up continues. The Listening Room is now much more stable although the work has been complicated. The scale of the space (compared to previous versions this is probably the smallest space) means that the presence of people or objects in the space can

change the situation much more radically than has been the case in previous installations. It is possible to position oneself in a number of hot spots where different notes will emerge from the general low feedback drone. Constructing this involves a Heisenberg-like interference from the listener or at this stage, myself, through the process of setting levels on the mixer . One tiny adjustment shifts the whole system, my current practice is to set the levels and leave the room for a few minutes, listening from outside. Working within the room becomes meaningless as the situation changes according to where you stand.

This morning I tried to re-hang the microphone (Audio Technique PRO-42) upside down to make the cable run simpler. This turned the feedback into an intensely uncomfortable sustained note which would not go away. Must be something to do with the design of this mic - probably the only microphone I've used that I have never taken to pieces to see how it works. So the cable run remains complicated.

Heisenberg's syndrome persists - I'm now convinced that the position of the mixer in the space affects the sound of the room (this is not unusual, recording studio design has to compensate for the presence of large mixing desks in front of monitor speakers). The less there is in the room, the more every detail of the smallest alteration is magnified.

Late lunch, on my return the installation is silent, the room feels cooler because I have the floor open to site the amplifiers and mixer and there is an underfloor air flow. Strange, as I had this open earlier and the system was quite loud. More working and waiting...

Monday 7jul03

Humidity.

I was with Peter Gordon in London last week and he told me about the engineer/producer Howard Scott, one of the pioneers in the development of the LP, who recorded the Columbia Masterworks stuff during the Goddard Lieberson years (as well as the Louisville Orch stuff Peter is re-mastering). Howard Scott kept meticulous notes on his recordings including not just the usual things like duration, location, technical stuff etc but also temperature and humidity. Peter also adds:

"I remember when LOLO gave a concert in Milan, the hall was packed and very humid and stuffy. Eric Liljestrang was mixing and described having to scramble to readjust his settings when the doors were opened at the intermission, airing out the place and cooling it down. I would imagine this was quite an issue in Kentucky, where the humidity can be stifling."

Today however, Tokyo is wet and reasonably cool so the installation sounds the same this morning as when I switched it off last night. So no opportunity to check the effects of stifling humidity, plus the room is behaving much better since Minoru reset the air conditioning.

The people working on the other installations are crashing and banging in the next gallery today - that has the unfortunate effect of making The Listening Room sound really good as it picks up the noise. When the place becomes quiet, like it would be during the exhibition, the installation

gets very dull - that's what I have to work on, so maybe this means a late night, when it gets quiet.

Tweaking continues, my current strategy is to set the noise gates not to cut off the sound but just to drop the level a few decibels - this is to try and set up a fairly robust although fairly static installation so that it will survive the duration of the exhibition and whatever may happen to it during that period. This appears to be working - the room is relatively small and the level is fairly low so the sound is very responsive to movement within the space. One reason I removed all the furniture on Sunday was to encourage people to move around in the room and explore this aspect of the work for themselves.

Sunday 6jul03:

Microphone now on the metal section below the long window. Mid frequencies are very dull but the system seems more reliable and reactive to movement of people within the room. A lot of activity outside the door, banging and drilling - the installation seems to be coping..

All furniture is now out of the room.

Improvement.

Afternoon - change of speakers from JBL Control 28 to Alesis.

Improvement.

A significant difference in the harmonic content. More work on the stairwell while this is settling/warming up.

Microphone moved to window surface.

Improvement

Things are getting better. I don't know exactly how I want the system to behave but have a strong sense of what areas are interesting.

Working out cable runs and equipment locations for the exhibition.

symmetry asymmetry (speaker placement)

stairwell:

sticky tape for sticking mics on walls in test positions
speaker placement - consider 2 zones - lower entrance axis (facing south?) and just round the corner (facing east?)
is there any natural light?

Haruhiko runs about between the two installation spaces with miles of cables. Rough placement of mics and speakers according to zone diagram in notebook. Seems to work straight away. Incremental refinements during the afternoon. Speakers now mounted on stands - ready to fix the installation into position.

Saturday 5jul03:

mic position - which surface?
what noise will leak into the space from elsewhere?

11.40 The blinds are open and the heat is building up The Difference Room is inadvertently creating itself where its not supposed to be.

first mic tests on longest wall, LH speaker gets high frequency from floor, pitches indeterminate at the moment.

16.30 Minoru has fixed the air conditioning, but the system is not behaving in a reliable stable way.

microphone now on the metal section below the long white wall. A little better, the 2 speakers sometimes play a little tune alternating between A and C. But still prone to going silent or going into extreme feedback on a very dull note.

The room resonance is fairly minimal and this is the central problem.

Friday 4jul03:

assemble equipment, adjust conditions of room - furniture, blinds etc
switch on basic system
position mic and speakers

decide location of everything

final positioning and tidy up

tech assistant Haruhiko Goto

try with and without chairs

Consider retaining a few chairs in the space, positioning to encourage people to move within the space.

remove or reposition plinths

A speaker should not be on a plinth - that could fetishise the object.

