Agostino Di Scipio

Untitled Public Lecture

Sound Installation as Ecosystemic Construction

transcript of lecture delivered by Agostino Di Scipio March 21st, 2011, Berlin, Universität der Künste (Sound Studies – Akustische Kommunikation)

When Julia Schröder invited me to contribute a lecture in this meeting, I was not sure what I should talk about. To tell you the truth, I haven't made a decision yet. I do have, here with me, some materials illustrating works included in the "sound. self. other" exhibition, currently open at the Galerie Mario Mazzoli [GMM], here in Berlin. I do have, too, materials concerning earlier works, that some of you may already know of, like *Background Noise Study*, *Feedback Study*, and others that I've presented in Berlin in various circumstances. [short pause] Let's focus on one of the installation pieces included in the exhibition. On one hand, it is new to all of you attending today, on the other it allows me to touch on issues of larger relevance in my own work. It's one of those pieces where many levels of understanding and experience seem to be in play. It's a sound installation, but one that is in a way ready to become a kind of "instrument", a device that can be played (and indeed it was played, during the vernissage of the exhibition, on Sunday night). So it reveals a kind of ambiguity that recent pieces of mine have been showing – I mean, pieces that were born with a specific kind of presentation or media in mind, but than developed into different forms of presentation – for example concert works that eventually became installations, or vice versa, installations that became concert pieces – or works born as installation and then actually utilized as "instruments" or anyway tools to perform with. [pause]

The piece I'm referring to is *Condotte Pubbliche* – that title sounds very odd to Italian ears, as the words "public conduits" are usually paralleled with a "private something" – for example, "condotte pubbliche e vizi privati" (public conduits and private vices). However, the English literal translation, Public Conducts, hides the key to the meaning of this title: "conducts" stands here both for "behaviours", conduits, and for "ducts", "tubes" or "pipes". In fact, as is clear from this picture [slide 1], showing the full installation as it was set-up last month in my studio, central to the work are two brass pipes, in other words two small "conducts" or "ducts", through which – as we'll see – sounds happen. In audio-engineering terms, the pipes are "wave-guides". At some point, as I was preparing this work, I felt a need to have some vocal materials heard through these pipes. The work actually functions in real-time and real-space, in the very site where it is built up, however it also features some short pre-recorded speech materials, heard from within the pipes every four minutes, eliciting different acoustic resonances, contributing to enlarge the resultant spectral and morphological qualities of sound created by the real-time, real-space process. Now, the word "public" in the title also refers to the fact that these pre-recorded vocal materials consist in segments of public speeches by either dictators or war-leaders of the last 100 years. In many languages, the word "dictator" is translated like "conducator" or "duce" or "Führer", or other nouns for "guide" [short pause] – or "conductor". As it was, the title was born as an overt, and not-so metaphorical reference to these "publicly shown pipes", but then it suggested that vocal materials should be included, acquiring a more metaphorical referential value. [pause]

Slide 1: *Condotte Pubbliche* (2011). Photo: Fabio Paparelli.

Slide 2: *Condotte Pubbliche* (at gallery Mario Mazzoli, Berlin 2011). Photo: ADS.

This is how it looks in the GMM [slide 2] where it is being exhibited in these days, and where it stays for the next two months, until May 21st. […] I define this work as an "ecosystemic sound construction". I use words like "ecosystemic", "ecosystem" (like in "sound-" or "audible ecosystems") to refer to the fact that the main, networked process in sound that I design and implement is not complete in itself, it can't work properly unless you put it in a real space, in a room: it needs to "chew" or "eat" noise in the surrounding environment to function and work; of course, it is not something that may ever sound exactly the same when you set it up in different rooms; it will always change depending on the specific room environment, but still preserving a sense of consistency (that is an important point, probably we'll come back to it later). Thus "ecosystemic" refers to a need to conceive of *oikos* – i.e. the "house" hosting the work – *and* the system – the equipment I bring in, possibly including human beings, human agents – as inseparable. Of all the pieces exhibited in the GMM, this is the only *room* installation – meaning the room is really essential to the way the sonic process unfolds in time. The other included pieces are somewhat less dependent on the room in which they are set up. [pause]

Here you see a list of the required equipment [slide 3]. Included are two brass pipes of length approximately 180 centimeters; two miniature microphones; one larger membrane microphone, made to hang from above, on the opposite side of the room as relative to the other equipment; then we have one piezoelectric sensor disc, it lays on the ground; then we have two "miniature speakers", better known as "earplugs", of the kind you can normally buy in any media-store; and two monitor speakers, like these ones [referred to the speakers in the conference room]; a computer and a sound card are hidden beneath, below the black curtain, running a signal processing patch of my own design, programmed with Pure Data. Requested are, too, nine short sound clips, with public speeches by dictators and war-leaders (I have personally chosen speeches by Ceausescu, Hitler, Mussolini, Franco, Salazar, Stalin, etc., and also George W. Bush's declaration of war on Iraq). These can be different, of course. Eventually, we may not be able to exactly understand the speech being played through the pipes; upon listening, one may perhaps recognize the timbre of the voice, the rhythm of the speech articulation, the prosody, the rhetoric intent; yet it is not my own goal to let the particular speeches to be understood and followed-up word-by-word. Finally, we have this large sheet of textile materials, a kind of thick, black curtain. The latter is meant to cover the computer, the monitor speakers and other equipment. But it also has two acoustically relevant functions – everything in my works has to do

Slide 3: Equipment for *Condotte Pubbliche*.

- two brass tubes, ∅ ≈ 3.5 cm, length ≈ 180 cm (same or different)
- 2 miniature microphones
- 1 condenser microphone, omnidirectional
- 1 piezoelectric disc (only included if floor is wooden)
- 2 earplugs
- 2 monitor speakers
- programmable digital signal processing computer (a Pure Data implementation is available from the composer)
- at least 9 short recordings of public addresses delivered by dictators or other publically recognized war leaders from early 1900 to present time; low quality recordings are ok, especially if their sound is audibly connotated by the recording medium or by the original sound reinforcement system used at the time of the particular public addresses.
- a large sheet of black (or other dark-coloured) soft textile material, ≈ 240 cm x 100 cm

with sound and is included in that it does affect the resultant sound, everything including stuff apparently not related to sound; even decor is very seldom without some acoustical function. The functional role of the black curtain, here, is first, to reduce the computer fan noise as much as possible (being a continuing noise, it would bias the main sound process in destructive manners); secondly, because of the particular manner by which it is placed upon the speakers, its ends act as mechanical filters for the higher frequencies heard over the tweeters of the two speakers, minimizing their acoustical diffraction, in other words dampening their feeding back into the pipes; so it's just a practical way to manage the balance in the sounds born by and within the brass pipes, the speaker sound, and the feedback of the latter into the pipes. I must say, using this black curtain is something rather unusual for me, as I normally prefer to let visible all of the stuff involved in the installation, including the technical components, cables, etc. In this case, however, the particular choice was made, because it has the acoustical functions mentioned – certainly not because of an aesthetic function! Actually, I don't like at all the aesthetic outlook of this particular work, especially in the way it looks in the snapshot taken in the studio [slide 1] – the black textile surface is really too shiny for me, in a way too distracting. Still, I just accept what it must be, for the purpose of the acoustical result. I just don't mind too much about the aesthetics of it all. Like all my installation works, the visual experience is much less crucial than the audible one. That said, I must add that the overall structure of *Condotte Pubbliche* looks very much like an altar, just as other installations of mine do... [long pause]

Before going into the details of how it is built, I'd like to play now at least one sound example [sound 1]. (I think you could somehow hear that, when speech sounds come in, the main resonant frequencies in the resultant texture shift, as the process is led into different resonant regions). [ADDENDUM: As a note of precaution, I should say that the sound examples played back in this lecture are hardly a good representation of the real sound experience: the way sound emanates from the installation and travels in space cannot be appropriately replicated in a stereo recording, let alone in an mp3-format sound file… Moreover, these examples are no more than a documentation, specific to what happened when I recorded them one day, last February, in a small apartment in L'Aquila (in an old building by then just restructured, next to the ruins caused by the earthquake of April 2009). So it's a sound document specific to that room, to that moment in time and to that place with its specific ambience noise.] [short pause]

[Sound 1.mp3: *Condotte Pubbliche,* 4 min.]

The work's main process in sound supports itself letting the room background noise nurture the networked feedback loops it consists of. Typically, for many minutes it just proceeds like that, and changes itself depending on noise events in the room. For example, when visitors enter the installation site, they affect room noise, and that in turn will cause changes in the sound process of the work. Which already leads us into something relevant for our discussion: you're never in the presence of the "work itself", there's no such a thing like the work "in itself", you're always attending something that changes because you yourselves are there, a fact that parallels the fact that each of you would change your internal state as a reaction to the sound and the work that is brought to you. So the work is no more an "object", a Gegenstand, something separate standing in front of you, rather it is something that you can not but affect. Let me say, this is not what people usually mean by "interaction", as the usual notion of interaction is that of an action that you deliberately do upon some device to make it react and change. Here we experience something different. The process changes, here, causing changes in sound and its articulation in time, only because you're there, only because of your physical and thus acoustical presence, of your body, your walking, your particular voice as you're talking, your particular clothes, etc. You're never in the presence of the "thing in itself": the work of art here is not defined as something having a definite profile, it changes upon your sonic presence, it accepts you and tries to be accepted by you. This circumstance is quite evident in occasions such as the vernissage, the opening of an exhibition: usually, a lot of people are invited, they of course make a lot of noise, and

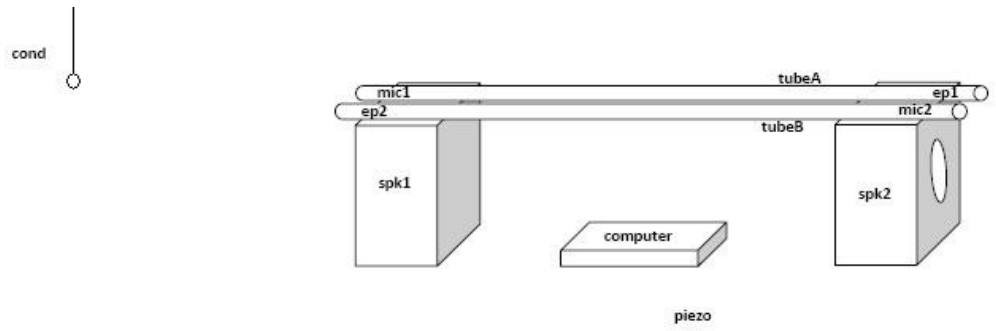
these works of mine tend to just and simply stay quite, silent – they just refrain from sounding, they step back – it's like they say: "if you talk, then I stay silent and listen, if you want to listen to me, then you shut up and listen"… In *Condotte Pubbliche* this is not as extreme as it was five or six years ago in the DAAD Galerie, when, with the help of the Elektronisches Studio staff, we set up *Untitled 2005, Ecosystemic Installation in a Small Reverberant Room*: the fifty or sixty people attending the opening, just by chatting and cheering and eating and drinking, made enough noise as to have the installation get reeeaaally shy and stay silent for prolonged stretches of time – only when they were asked to pay attention, could the work live a while and make some sound. [pause]

Anyway, for me the latter point is only a very obvious manifestation of more relevant issues, that can be observed from two perspectives: one I've already mentioned – there's no such as thing as the work "in itself", alright? Hence the work is not an "object" (of course it is neither a "living system", and if anything no living system exists in a purely audible domain, still it stands and lives on a permanent relationship with the environment of a kind proper to living systems). The other relevant implication is a kind of political one: music (just like all sound arts) is for me an art of relationships – again, there must be a balanced exchange between the viewed and the viewer, the listened-to and the listener, so that the listener becomes part of the work – the listener makes the listened-to while the listened-to makes the listener. It's an encounter, a meeting of someone with someone else. That becomes more significant to me, as opposite as standing in front of something which is presumed to remain itself independent of listening, of the involvement and the attention paid to it. [pause]

I should stress this idea, which is for me a political one too, of sound not being an "object" – some thing that can be stored, purchased, conveyed "as such", independent of time, space and technologies used for its circulation – but as "event" – something always dependent on given conditions, on time-specific and room-specific material conditions, including the body of people listening. [pause]

In most of my works, the very first preoccupation is one concerning how possibly can sound take place, and fill the otherwise (almost) silent flow of time. It's a kind of ontological preoccupation: how is sound to happen in the first place? Music is an art of sound, of course, but I do not set to start with existing sounds, I start focusing on the pre-conditions for some (any) sound to be there. I am more concerned with the minimal requirements based on which sound might possibly happen and might possibly be articulated in time. I leave it open if, what emerges from that, is worth of calling "music". That may happen but it remains always uncertain, risky, never granted beforehand. With concert works, things depend so much on the room noise as to acknowledge the audience itself a non-negligible role in the actual room acoustics (when the audience come in the concert place, the room's sound character could be significantly altered, adding or subtracting a lot to the acoustics of the empty room). [short pause] By the way, in passing I should note that this latter point too has a kind of "political" (or ethical) implication. The audience is a small community of people, gathered together to "pay attention to". A single individual does not really affect the sound process, but the "collective" – the community that forms in the performance – really can, and in the end it beco-

Slide 4: *Condotte Pubbliche.*

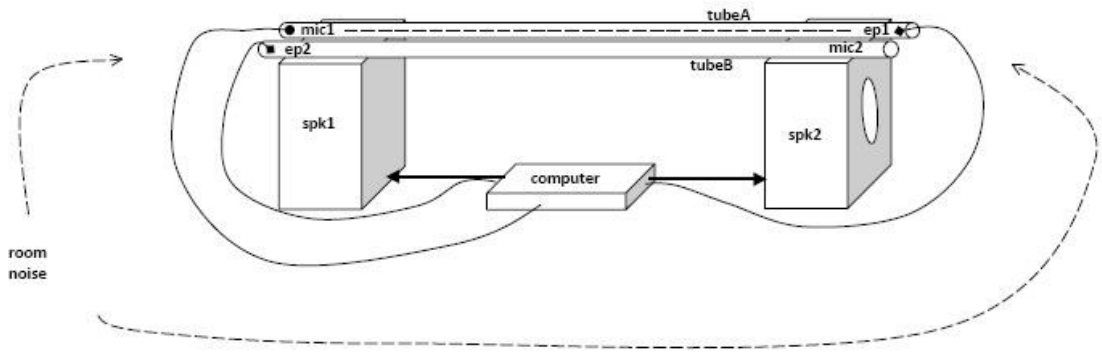


mes as necessary a component of the ecosystemic process, a partial element of the dynamical interrelationship between human beings, room, and technologies taking part in the performance. [short pause]

Let's move now to some deeper details of *Condotte Pubbliche*. As you see [slide 4], there are two pipes, parallel, leaning on the two speakers. The speakers, pointing to opposite directions, lean on the ground. There's a computer laying on the floor between the speakers, below the pipes. In the one pipe – denoted as "tube A" – are a miniature microphone – close to one pipe end – and an earphone or earplug – close to the opposite end. In "tube B" are another microphone and another earplug, but the ends at which they are placed are swapped. A condenser microphone stands up high (we have seen it hanging from the ceiling, in a previous illustration). A piezo disc lays on the floor, especially requested if the floor surface is in wood, because then the piezo would channel into the overall sound process the noise events of people walking into the room; moreover, the piezo would also pick the mechanical vibrations transmitted by the speakers themselves, as they are in fact laying on the floor. As we'll see soon, most of what is implicated here has to do with feedback processes. Usually, it's feedback processes mediated by air (the usual medium of acoustical energy transfer); however, this particular case is a feedback line (between speakers and piezo) mediated by the floor wooden structure. The particular picture does not show the black sheet covering everything except the brass pipes and the piezo. [pause]

Now, again, how does sound happen here? It's really simple [slide 5]. The microphone at the end of "tube A" is attached to the computer, where the sound it gets is strongly amplified and driven to the earplug placed at the opposite end of the pipe. That creates a feedback line: what comes out of the earplug goes back into the microphone. "Strongly amplified" doesn't mean that we hear a loudest, deafening sound; it just means that the level is much stronger than usually these kind of transducers – mic[rophone] and earplug – can handle. How exactly "strong" depends in the end on a number of technical features beside the pipe's own natural amplifier effect. The mic input is fed with more and more earplug sound through the pipe, until the feedback loop starts ringing, making sound. This is a very well known phenomenon, sometimes called "Larsen tones": all high-gain electroacoustic chains can easily result in ringing feedback and related distortion byproducts. In usual situations, we want to avoid ringing feedback and Larsen tones: when microphone levels are wrongly managed, that often results in annoyingly loud squeals and howls (a problem often managed in successful ways, yet it sometimes hurts our ears). In this installation, however, that technical problem represents the only opportunity for us to make sure some sound will be there; a technical problem (self-feeding amplification of background noise) is thus turned into a basic resource to create something sounding. You may think of that also as an implicit comment on the role of electroacoustic technology, which indeed here is not so much to "reproduce" sound (its usual task) but to "produce" it, to make it happen; the very way by which sound is here, then, is by bending the main functionalities of these (largely available, if not even cheap) technical tools, provided the level of background noise is (or is made) strong enough.
[pause]

Slide 5: *Condotte Pubbliche.*



The pitch and spectral features of the resultant feedback tones will depend of course on the acoustics internal to the pipe, beside the technical characteristics of mic and earplug. The pipes are “waveguides”, acoustical resonator with their own mechanical, acoustical properties, which determine the feedback system resonances and the dynamics of sound events born of it. Moreover, when extra noise events happen in the room (for example people walking or talking, etc.), these will of course affect the feedback loop and thus, for example, elicit different resonances or reinforce the natural one – in short, noise in the surrounding interferes in the feedback loop and changes its sonic manifestation.

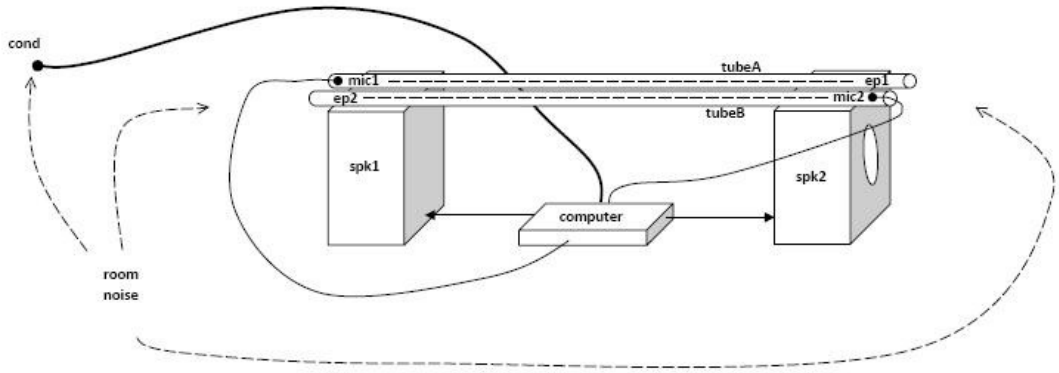
(I’d like to mention, on this regard, a series of pieces of mine, titled *Modes of Interference*: what I do, with those pieces is precisely the same as here, namely, create a sounding feedback loop – but through musical instruments – and find ways to interfere with that process; the same holds with *Stanze Private*, an installation that turns a number of glass bottles and vessels into a network of small resonating rooms where a variety of feedback loops takes place).

Importantly, the computer bridging between the microphone and the earplug handles a kind of self-regulating mechanism: when the level of the feedback sound in the pipe gets very loud (as relative to a given threshold), it dampens the output level, preventing it from growing even more and from getting heavily distorted. That basically turns the feedback loop into a kind of oscillator, a self-dampening or self-regulating sound generator, sensitive to noise in the surrounding ambience. I mean, there are many technicalities involved in such a simple process, and I won’t go into them here, however I should mention that this self-regulatory behaviour can affect and change the feedback system resonances, especially depending on its micro-level timing, i.e. how fast the i/o balancing mechanism works, at signal level. So what we get is an automatic amplitude-regulating mechanism having side effects in the frequency domain, as well as on the phase of the resultant sound. In a small space such as this pipe, this “duct”, changing the sound signal’s phase may induce significant changes in further sonic developments (phase modulation is relative, here, to a space of only few centimeters). [pause]

The feedback sounds born of “tube A” are further processed, slightly transformed by the computer. The processing mainly involves delay lines and ring-modulation – both quite simple signal processing methods. There we see another small implication of extra-technical nature. All that I do, here, must be done in real-time, using very simple, computationally inexpensive processes, in order to get more complex global behaviours: the economics of signal processing is very important, in my works, and I try my best to exploit few and simple technical possibilities in a way that allows for a large variety of emergent sound phenomena; in other words, rather unsophisticated but well-connected process components should result in richer and complex global behaviours. In the context of *Condotte Pubbliche*, ring-modulation represents a very easy and cheap way of signal processing: by interacting with other very simple and “local” processes, it spread small bits of information into a network of signal connections, which eventually yields a variety of sounding results at a higher level. This may appear more clear if I move on with my illustration. Seven seconds later, the ring-modulated sounds born of “tube A” are heard over the earplug in “tube B”, and there they interfere with the feedback sounds born in that pipe. They are also further ring-modulated and then delayed – up to 85 seconds – and finally heard over the monitor speakers. Because of the iterated ring-modulation, the spectrum is heavily altered, so as they re-appear in the speakers, you won’t recognize them as the same sounds heard from within the pipes at an earlier time, typically they will be richer in lower frequencies and less saturated. [pause]

An identical process chain takes place from within “tube B”. Different from what you see in this slide, however, the actual sound installation has two pipes of slightly different length and diameter. Therefore, they will have different modes of vibration, and thus will induce different feedback tones and system resonances. [pause]

You might say, well, earplugs are not very good transducers, they do not really stand for “loudspeakers”. That’s of course completely correct. You may come up with very good, professional miniature microphones,



Slide 6: *Condotte Pubbliche.*

but there's no way to get not even a fairly acceptable miniature speaker. Moreover, the microphone and the earplug in the pipes are very heavily stressed by the work they are doing in this installation. The sonorities born in the pipes via the feedback loop, are quite peculiar in that their timbral quality is due, among other things, to mechanical distortion byproducts – especially in the two earplugs (if you leave this installation in an exhibition for many months, the prolonged stress will eventually cause a degradation in the mechanics of the earplug, causing a more reduced variety of system behaviours; so you'd better give the gallerist [owner of the gallery] some extra earplugs that, at some later time, can be used to replace the older one). Earplug distortion is quite peculiar and surely makes for a highly non-linear component in the overall process, which anyway enriches the palette of resultant sonorities. Again, I am using a piece of equipment that is usually sold and purchased as gear made to listen to the music, good enough as to use it at least when we go around with our mp3 player; but here it is openly declared and accepted for what it is, i.e. "not so good" gear, yet capable – precisely because it is not that good – of causing particular phenomena in sound of a kind you normally don't want them nor expect them to cause. The technical component design is, in a way, appropriated and re-functionalized: it is there no more to "reproduce" (a stream of recorded sounds), but to "produce", "adding" to the system dynamics and thus widening the range of sound phenomena emerging from the process implemented. [pause]

Clearly, the sounds born of the second pipe are themselves ring-modulated, and they are heard in the first pipe with a delay of 7 seconds: that way, just like the ring-modulated sound born in "tube A" interfere with the feedback process in "tube B", the ring-modulated sounds born in "tube B" interfere and eventually alter the feedback process in "tube A". Then, the "tube B" ring-modulated sounds are also further delayed (approximately 85 seconds) and again ring-modulated, and eventually heard in the larger speakers. [pause]

The sound coming out of the two speakers, it must be noted, reaches easily the pipe ends, so it re-circulates in the pipes, interfering with the local feedback loop and becoming part of the source sound that, next time around, will be (again) delayed and ring-modulated. Beside, I took advantage of that to determine two more feedback lines, one coupling the microphone in "tube A" with the opposite speaker, the other coupling the microphone in "tube B" with the other speaker [slide 6]. Now, you remember that the level of the sound born from the feedback lines in both pipes is handled in the computer by means of a kind of self-regulating mechanism. The same principle is applied here, in the feedback loops between the pipe microphones and the larger speakers. However, the latter work through a larger room than the pipe, that is, through the room ex ternal to the pipes, namely the room or hall hosting the installation. A condenser microphone is in the room, hanging from up high, and the level of the sound it gets is used by the computer to get a rough idea of how loud is the total room sound. We have a picture of that microphone [slide 6b], the way it was arranged to

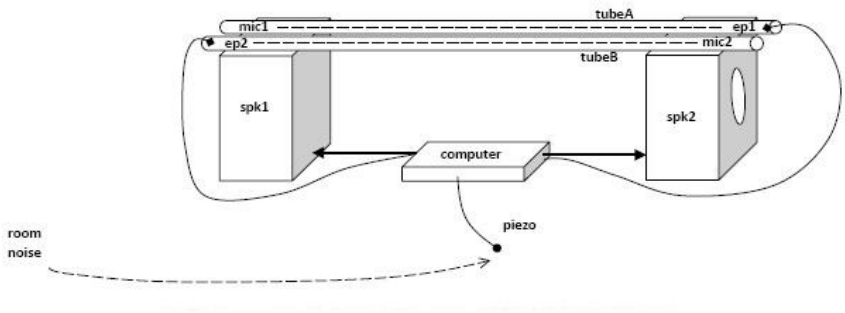
hang from the ceiling, in the GMM exhibition. When the total room sound gets stronger (because the installation gets loud, or because frequent noise events happen in the room), the loop gain is downscaled, so these extra feedback lines are constantly kept under control. That is where the room acoustics seems to be more directly involved in the overall sound process. However, clearly the acoustics of the room is implicitly a crucial issue already for the feedback process in the two pipes. [pause]

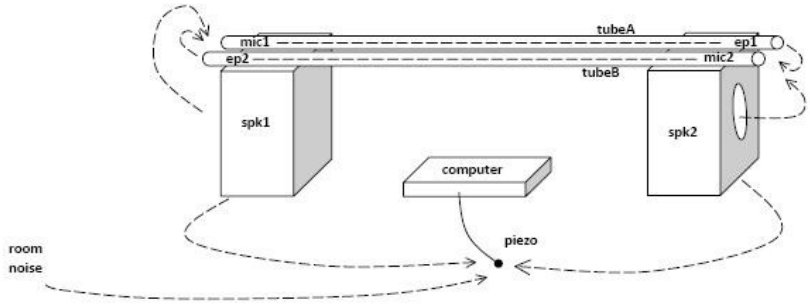
Slide 6b: *Condotte Pubbliche* at gallery Mario Mazzoli, photo: ADS

The piezo microphone laying on the ground, has two different functions [slide 7]. It gets the noise of the visitors' steps across the floor, bringing it to the computer; there that sound is delayed (15 seconds) and sent to the earplugs, eventually affecting the feedback process continuing in the pipes. Furthermore, the piezo gets some of the vibrations induced by the speakers into the wooden floor. So it creates an additional feedback loop, but one that is mediated through the floor wooden structure. That certainly contributes to the overall system dynamics, yet it is very hard to exactly determine what that contribution can be in the long run. You see the piezo on the floor from the picture of the full installation [slide 2]. [pause]

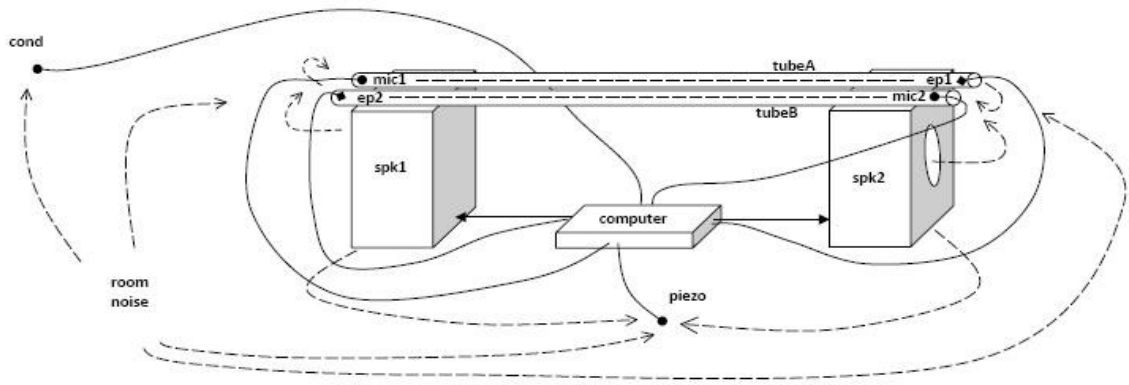
Here is an important slide [slide 8]. The dashed lines represent, let's say, purely mechanical connections, purely acoustical energy exchanges. No electro-acoustic connection is evidenced in this slide, except for the piezo connecting to the computer. The sound of the first pipe goes into the second pipe, mediated by the surrounding room; the sound from the second pipe goes into the first, mediated by the room; the sound of the two speakers reaches both pipes, through the room; the speakers also transfer vibrations into the wooden floor, so their sound is gotten back into the feedback network via the wooden structure upon which the piezo disc is placed. So, while many electro-acoustic and computer-mediated connections are involved in this installation, the web of relevant interactions include indeed a significant number of purely acoustical connections among system components. In addition, of course, all sound events born in the close proximity of the installation are to become part of the overall feedback network, thus audibly affecting the resultant sound. If the gallery room is acoustically not well isolated – cars passing by in the street, people shouting and drinking next door – that sound will also become part of the sound materials eliciting different resonances and sonic transformations in the installation. In the last slide [slide 9] you see the full network of sonically relevant interconnections established in this work (the lines connecting from the computer to the two earplugs are those where the play-back takes place, every four minutes or so, of the speech materials mentioned at the beginning of this talk). [short pause]

Slide 7: *Condotte Pubbliche*





Slide 8: *Condotte Pubbliche*



Slide 9: *Condotte Pubbliche*

In short: I design and dispose of a number of system interactions, which define a network structure (the network includes, importantly, a number of delay units, that is, time-shifting mechanisms – which means that, as time passes, past events resurface in due moments across time, affecting present events). What this network is about is, in the very first place, to make some sound (ringing feedback loops, dynamically changing in time), and then to try to articulate it, to modify it across time (delay units and ring-modulation). All "output" (no matter whether delayed or not) becomes an "input" (the only thing that remains "just an input", the only sound coming from a totally external agency foreign to the feedback network, is the speech material introduced in the pipes every four minutes). With delayed feedback lines, output materials become input materials at later moments, interfering or anyway overlapping with sonorities born of the direct feedback lines. Actually, it's difficult to say what is "input" and what is "output" – in a way that distinction holds no more: as I said, all output is also an input, input and output are constantly coupled, they cannot be separated. In addition, you cannot separate yourself, your body, from the installation and attend its performance "as such": you cannot detach yourself from the piece, just as the process of the piece cannot be detached from your presence, from the visitors, from the surrounding room space. The piece is open to the environment. Note that, what it finds in the environment, includes traces of its own past manifestations mirrored in the way these do affect and did affect the environment. There is little way to discriminate sounds born of the installation "itself" and sounds born of the surrounding ambience, of the noise events in the room. One of the questions that keep me busy when I work on such designs is, to what extent the piece depends on itself and on its own history, on its previous manifestations (to what extent it is "autonomous"), and to what extent it depends on accidental events happening in the surrounding room ("heteronomous"). That balance is very important to me. It makes for a system that is "open" to the environment (it accepts noise from there), and at the same time ready to "close" onto itself, to preserve identity and function. That what li-

ving systems do: they are open to the environment (they need noise and energy to grasp from the surrounding space), yet they cannot open themselves too much, preventing external noise to alter their main functionalities (otherwise it would be like dying because of too many stimuli; the struggle to keep identity and functioning is always at risk, but it would be just in vain where the system not capable to "close" and protect itself). The dialectics of "open" and "close" (construction of identity and availability of change) is crucial here, and not really as a metaphoric reference. [pause]

To conclude this talk, I'd like to play back for you a sound example, showing how this installation can be "touched upon", played and performed as a kind of complex, idiosyncratic instrument. It can be played with your hands or else, close to the four pipe ends. In which case, the human agency involved here is not just that of the visitor(s), whose audible presence becomes part of the work, but also that of a performer deliberately biasing or trying to govern the installation process. In the opening of the GMM exhibition, Gianni Trovalusci performed in a rather improvisational manner with his hands and mouth, with the pipes of *Condotte Pubbliche*. [pause]

[sound 2: *Condotte Pubbliche*]

The idea, here, is that of a performer acting upon a system which is itself already "autonomous" – literally from Greek: self-governing, self-organizing. But then, his/her actions or reactions cannot be, so to say, entirely free – s/he cannot do with that whatever s/he likes: there must be an awareness that each tiny action changes the system's own behaviour; one has to exert his/her actions in a very tentative, exploratory and, what's more important, responsible way, as every small thing will have long terms effects, often unforeseen (unforeheard), setting the context (or destroying the context) for later actions. S/he cannot pursue some own, independent idea, as the piece needs a variety of external stimuli to show its potential, and could simply not respond were the stimuli introduced by a performer to reveal redundant, repetitive, or narrow in range. In a way, it's a very difficult situation for a performer, but it's also quite a challenge: the music is not there to be made alive or to be given some flesh; no sound is there to start with. What is there are systemic interdependencies that, once stimulated or activated, can only be listened-to, followed-up or re-oriented, accepted or negated… The performer becomes just another (but crucial) "system component". One of many, not the least important one, but not one dictating his/her own directions. This is something I am quite serious about: responsibility upon the actions we do is crucial, as we know, in our daily life, and I don't see good reasons why music or art should be an exception to that situation. *Condotte Pubbliche* is a sound installation which lends itself well to become the "instrument" of an experience of self-knowledge, of improved self-awareness, especially on the side that "self" is constantly connected to "non-self" to define itself, always linked to "other", to given-yet-limited possibilities for actions in the surrounding, to a space that has to be dealt with in well-balanced, responsible manners. [ADDENDUM: A most peculiar element perhaps is, a work like this makes "responsibility" – or the traces of someone's presence and relationship to the surrounding – audible. While that may be more evident in a performance situation, indeed the same notion lays at the heart of the installation itself, in the way each interacting system component works along with the others, thus contributing to the emergent musical texture.]

A discussion followed, with comments and questions from people in the audience, which is not transcribed here.

Bibliography

Agostino Di Scipio (selected bibliography)

"Listening to Yourself through the Other Self. On Background Noise Study and other works", *Organised Sound*, 16(2), 2011.

"Emergence du son, son d'emergence", *Intellectica*, 48-49, 2008.

"Dynamic Networks of Sonic Interactions. Interview with Agostino Di Scipio, by Christine Anderson", *Computer Music Journal*, 29(3), 2005.

"Per una crisi del live-electronics. I'm sitting in a room di Alvin Lucier", *Rivista di Analisi e Teoria Musicale*, 2, 2005.

"Klangstaub. Die Notwindigkeit einer aesthetischen Orientierungslosigkeit", *Positionen*, 64, 2005.

"Sound is the Interface. From Interactive to Ecosystemic Signal Processing", *Organised Sound*, 8(3), 2003.

"Heidegger, Hölderlin et John Cage (Postface à l'ouvrage de Michael Eldred)", *Revue d'Esthetique*, 43, 2003.

"Der Komponist als Rauschengenerator". In the catalog of the festival Inventionen, Berlin, 2002.

"In bilico. Riflessioni su Parole da Beckett", in: *Per Giacomo Manzoni* (C. Di Gennaro and L.Pestalozza, eds.), LIM, Lucca, 2002.

"A story of emergence and dissolution. Analytical sketches of J.C.Risset' Contours", in: *Electroacoustic Music: Analytical Perspectives* (T.Licata ed.), Greenwood press, New York, 2002.

"Tecnologia dell'esperienza musicale nel Novecento", *Rivista Italiana di Musicologia*, 35(1-2), 2000.

"Da un'esperienza in ascolto di phonè e logos. Testo, suono e struttura in Thema (Omaggio a Joyce) di Berio", *Il Saggiatore Musicale*, 7(2), 2000.

"Uno scenario post-digitale? Riflessioni ambivalenti sul suono in Internet", *Musica/Realtà*, 65, 2001.

"Synthesis of Environmental Sound Textures by Iterated Nonlinear Functions", *Proceedings of the Int'l Workshop on Digital Audio Effects* (DAFx), Trondheim, 1999.

"El sonido en el espacio, el espacio en el sonido", Doce-Notas Preliminares, 2, 1998.

"Questions Concerning Music Technology", *Angelaki Journal of Theoretical Humanities*, 3(2) 1998.

"The Problem of 2nd Order Sonorities in Xenakis' Electroacoustic and Computer music", *Organised Sound*, 2(3), 1997.

"Herbert Brün. La composizione come prassi critica immanente", *Sonus*, 9(1-2), 1997.

"Musica tra determinismo e indeterminismo tecnologico", *Musica/Realtà*, 53, 1997.

"From Concret PH to Gendy301. Compositional Models in Xenakis' Electroacoustic Music", *Perspectives of New Music*, 36(2), 1995.

"Centrality of Techne for an Aesthetic Approach on Electroacoustic Music", *Journal of New Music Research*, 24(4), 1995.

"Synthesis by functional iteration. A revitalization of nonstandard synthesis", *Journal of New Music Research*, 25(1), 1996.

"Formal Processes of Timbre Composition Challenging the Dualistic Paradigm of Computer Music", *Proceedings of the Int'l Computer Music Conference*, Aarhus, 1994.

"Composition by Exploration of Nonlinear Dynamical Systems", *Proceedings of Int'l Computer Music Conference*, Glasgow, 1990.

Abstract

In the lecture transcribed here, Di Scipio commented on one of his sound installations, Condotte Pubbliche (public conducts), at the time being featured in his solo exhibition "sound. self. other", at the Galerie Mario Mazzoli, in Berlin. In rather informal terms, the lecture describes that particular work as an "ecosytemic construction". It overviews the real-time and room-depedent process, evidencing differences and similarities with previous of Di Scipio's works. The artist also rhapsodically touches upon a number of more general implications of aesthetic and ethical-technological (political) nature.

Author

Agostino Di Scipio (Naples, 1962) is a composer, sound artist, music-theorist and writer. His work has developed mostly from personal research into unconventional sound synthesis/processing methods inspired to phenomena of noise and turbulence, beside the exploration of extended playing techniques for musical instruments. In recent years, his main focus was on the "man-machine-environment" interaction (e.g. the live-electronics solo works *Audible Ecosystemics* and a number of sound installations). Despite the uncompromising approach on sound, technology and composing, Di Scipio's work has gained international attention and has been featured in venues and festivals worldwide. He is based primarily in his own studio, in L'Aquila, and occasionally joins larger facilities connected to artist-in-residence programs. Electronic Music Professor at the Conservatory of Naples, guest artist and guest lecturer in several international institutions. More info and list of works:
http://xoomer.virgilio.it/adiscipi/

Title

Agostino Di Scipio, *Untitled Public Lecture. Sound Installation as Ecosystemic Construction*,
in: kunsttexte.de/auditive_perspektiven,
Nr. 3, 2011 (11 Seiten), www.kunsttexte.de.