‘From a musical point of view, the world is musical at any given moment’: an interview with Bill Fontana

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Bill Fontana is an American composer and artist who has been working with large-scale sound installations since the 1970s. In his installations he recontextualises sounds by transmitting them from one location to another, and uses the transported sounds as acoustical ‘overlay’, masking the sounds naturally occurring in the installation spaces. His installations often occur in central urban environments, and he has, for example, been commissioned in conjunction with the fifty-year anniversary of D-Day (1994, Paris), and the 100-year anniversary of Brooklyn Bridge (1983, New York City).

Q: Bill Fontana, you are educated as a composer, yet you have worked with sound installations and sound sculptures since 1974. What made you go in this direction?

A: I am educated as a composer and also as a philosopher. I majored in philosophy and studied composition at the same time. The meaning of sound was and still is the main issue for me. This is an issue of perception and how the sounds someone hears are processed. I came to realise that if my state of mind was musical, then all the sounds around me became music. So many times I experienced the sounds of a place as having the same complexity and beauty that anyone’s music could have. I tried to record these situations.

From the late 1960s to the early 1970s my work went from minimal music to near silence to sound sculpture. My last composition from this period, *Phantom Clarinets* (1970 to 1979), is a duet in which each performer simultaneously sustains long tones that are slightly out of tune and played as softly as possible. This creates an auditory illusion in which the differences in pitch are louder than the individual sounds of the instruments. This creates a spatially disembodied subsonic vibration that modulates the ambient noise in the space.

At this point, the central focus became the ambient sounds of spaces and the context of sound. I became interested in how music is going on all the time around me. The first sound sculptures consisted of using objects that perpetually processed ambient sound in a musical way. In *Sound Sculpture with Resonators* (1972 to 1975), I used objects such as large glass bottles, tubes, sea shells, etc., and placed microphones inside of them and relayed the sounds to another space. These objects were normally placed on the roof of a building and broadcast to an interior space of this building. It was fascinating to see how the resonance of these things could turn any sound into something very musical.

Sound recording had also become an important medium at this time, and in 1974 I began to work for the ABC in Sydney to record how Australia sounded. With access to state-of-the-art recording equipment, I began to make eight-channel field recordings that mapped the sculptural properties of an acoustic situation. *Kirribilli Wharf* (1976) was my first eight-channel field recording and represents the beginning of the current state of my work. It was a real-time (one hour) recording mapping of the wave events in this floating concrete pier, as the moving water percussively closed the bottom ends of eight vertical, cylindrical holes in this wharf. This was then played as a sound installation at a number of exhibition spaces in Australia and then later at the Whitney Museum in New York.

Q: John Cage replaced music with natural sounds, Russolo replaced music with noise – how do you look at music and composition?

A: I replaced the concert space and its fixed intervals of listening time with the perpetual and indeterminate listening time of a sound sculpture in a public space.

Q: Some place in your essays you are saying ‘. . . the world is musical at any given moment, if one has a musical point of view . . .’. Could you develop that thought a little further?

A: For me as a composer and artist, music is a state of mind, a way of approaching the world. It is a way of discovering the patterns and structures that exist in the found acoustic world. All of the sound sculptures explore this in the way microphone positions are selected. The translation of

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this into a public space where the sounds are relocated is a strategy for making these sounds something to hear.

Most people use their visual perception to tune out and not pay attention to ambient sounds of a given space. By carefully placing naturally occurring environmental sounds in a space where they normally do not belong, this perceptual masking technique is defeated and people are confronted with sounds they cannot ignore.

Q: It seems that this is one of the most important thoughts in your work *Sound Bridge*. Could you describe the ideas behind the choice of installation sites and sounds, along with some detail on how you recorded, transmitted and diffused the sounds at the project sites?

A: The relocation of sound has been a basic operating principle in every project of mine in the past thirty years. The principle is partially derived from Duchamp's idea of the found object but taken to a different place. Visual perception and visual identification of spaces teach us to tune out the sounds we expect to hear in these places. Inserting an environmental sound into a visual context where it is unexpected bypasses people's natural avoidance of listening. Some projects have been much more radical in this way, such as the *Sound Bridges* that link very distant sites and sounds. The first *Sound Bridge* between Cologne and San Francisco in 1987 used a stereo analogue satellite channel for transfer of eighteen channels of sound from San Francisco and Cologne. It was a radio performance organised by WDR Cologne that linked two independent sound sculptures at the San Francisco Museum of Modern Art and the Museum Ludwig. Both of these projects were about the sounds of each city. In San Francisco it was live duet between the Golden Gate Bridge and Farallon Islands National Refuge and in Cologne it was a map/portrait of the city.

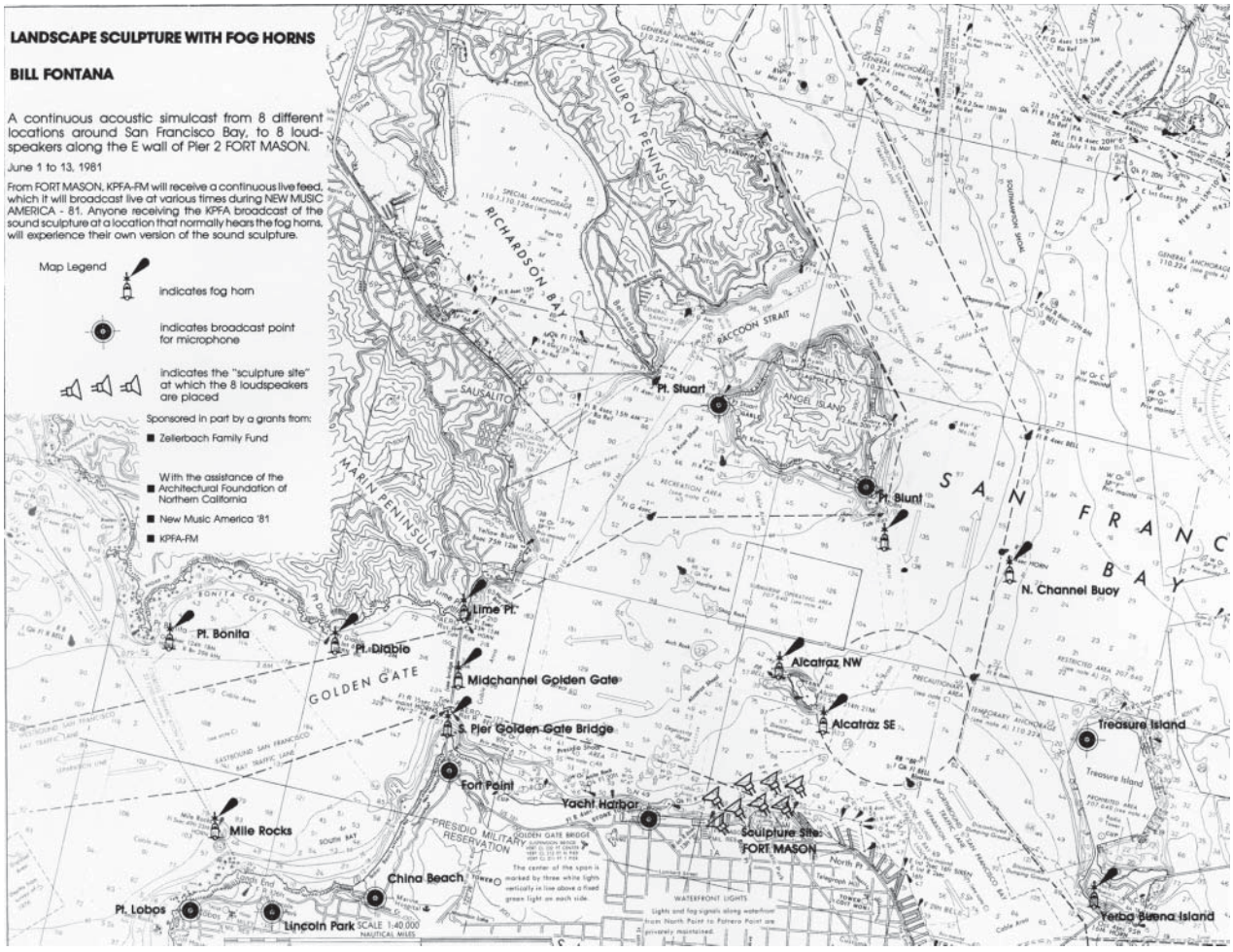

Figure 1. Map of foghorn and speaker placement in the first *Sound Bridge* foghorn. The circles with crosshairs represent microphone broadcast points, the loudspeaker icons indicate the sculpture site at Pier 2, and the lighthouse renderings show foghorn locations in the SF Bay area.

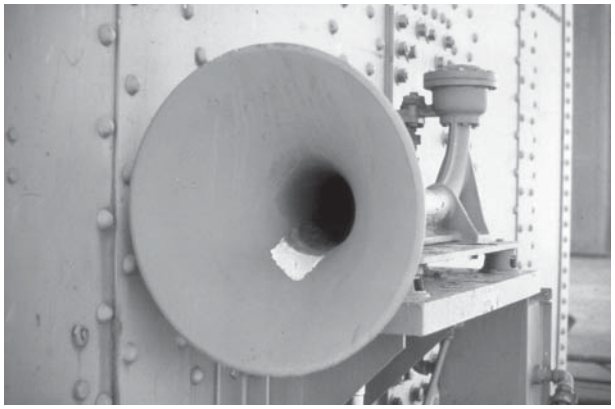

Figure 2. Foghorn from Golden Gate Bridge in San Fransisco fog.

In 1993, I did another *Sound Bridge* between Kyoto and Cologne, which are sister cities. This was of course a radical translocation. The sounds from two different cultures and acoustic environments played in public spaces in each city that were both cultural zones. In Cologne, the Heinrich Böll Platz of the Museum Ludwig and in Kyoto the public space in front of the Kyoto Modern Art Museum. Temple bells, fish markets, gardens, spring birds, Japanese language from public spaces and the train station in urban Cologne, while in urban Kyoto the German language in public spaces, spring birds, bells from the cathedral, the Hauptbahnhof . . . This transmission was much more advanced technologically than the 1987 project, and only six years apart . . ., but the medium was a 2 Mbit digital line over which sixteen live audio channels went in each direction simultaneously.

Q: You are often piping sounds from nature into urban contexts. How do you select the sounds, and what are the artistic intentions, so to speak, in, for example, the works *Sound Island* (Paris 1994) and *Vertical Water* (New York 2001)?

A: Three projects, *Landscape Soundings* (Vienna, 1990), *Vertical Water* (New York, 1991) and *Sound Island* (Paris, 1994) explored the use of natural sounds to transform an urban space.

In Vienna the situation was a grand plaza situated between the museums of Art History and Natural History. The city of Vienna, by way of its May festival, had asked me to create a project here on the topic of Art and Nature. I researched the natural history of Vienna and found that most of the city had been a wetland of the Danube. East of Vienna was the last remaining ancient Danube wetland, the Hainburger Au. At the time, this was famous because the Austrian government had unsuccessfully attempted to build a power station there, which would have destroyed this environment. This was prevented by organised protests in which citizens attached themselves to trees. With the collaboration of the ORF (Austrian State Radio), I installed sixteen microphones and some hydrophones in this wetland forest and transmitted a living sound map to this grand space in Vienna. The hydrophone sounds were played from speakers at the periphery of the space, creating an acoustic curtain that masked the sounds of traffic. Within the space, speakers on the facades of the two parallel museums played the live sounds of the forest, which completely transformed the feeling of this urban space without changing anything visually.

In *Vertical Water* I played the sound of Niagara Falls on the facade of the Whitney Museum in a way so that the physical motion of the falling water became vivid on the facade. The natural white noise of this

Figure 3. Niagara Falls.

Figure 4. Arc de Triomphe.

great waterfall completely masked the sound of traffic on Madison Avenue. I left New York and went to Paris looking for the noisiest place I could find, which turned out to be the Place Etoile, the busiest traffic circle in Paris. With the lucky coincidence of the fiftieth anniversary of D-Day, I was able to realise *Sound Island*, in which the live sounds of the sea from the Normandy coast were transmitted to a sound system on the facade, again masking the traffic while creating this amazing displacement of sound that completely altered one's relationship to the iconic monument Arc de Triomphe without changing anything in the way it looked.

Q: Your installations could not come to life without technology. Can you describe your relationship to technology, and what types of technology you have used in specific works?

A: The technology is a tool and a means to an end. The basic aesthetics have not been changed by technology as much as they have evolved. My knowledge of listening devices, microphones, hydrophones and accelerometers has broadened; the ease with which sounds can be transmitted digitally today is amazing.

Q: Popular buzzwords today are interactivity and audience participation – have you ever employed this in any of your works?

A: Not really. I think that perception, listening, experiencing and thinking are highly interactive and participatory actions.

Q: You mentioned microphone placement as crucial for your work. Can you say something about your recording techniques – microphones, placement, filtering and so on?

A: The microphone placement and the resulting simultaneous listening perspectives are the essential compositional acts. The translation of this spatial composition into loudspeakers and architecture makes it sound sculpture. The decisions about placement and the types of listening devices to use are an intuitive process based upon years of experience that is difficult to reduce to an explanation.

I have always asked myself a rhetorical question in relation to a sound that I wish to listen to: *What is this sound that I am hearing? It is all the possible ways there are to hear it*. The microphone placements for me are always investigations into the simultaneity of all the ways there are of hearing any given sound.

Q: I am sure that you are equally concerned with the sound reproduction systems as you are with the recording. Can you exemplify for us how you are constructing a playback system, with regards to distribution, loudspeaker characteristics, time differences, etc.?

A: The loudspeaker is of course very important; it is what is making the sound. In the last years I have developed a strong relationship with the world's leading loudspeaker manufacturer, Meyer Sound Labs, and I now exclusively use their speakers in my projects. These have proved to be the most reliable systems for reproducing sounds in the difficult acoustic situations of public spaces.

I have also become interested in the spatialisation of sounds and using non-static matrix mixing systems to give sounds a spatially dynamic presence in a space.

Q: The technology is a means to an (artistic) end – in, for example, your work *Entfernte Züge*, you are placing sounds from a busy railroad station in Cologne into the bombed-out shell of Anhalter Bahnhof in Berlin – Europe's busiest train station before WWII. What did you want the public to experience, and how did you construct the installation to make it happen?

A: I was interested in acoustic memory. The loudspeakers were buried in rows where the tracks of the old station had been. The speakers pointed to

Figure 5. Evening at Anhalter Bahnhof.

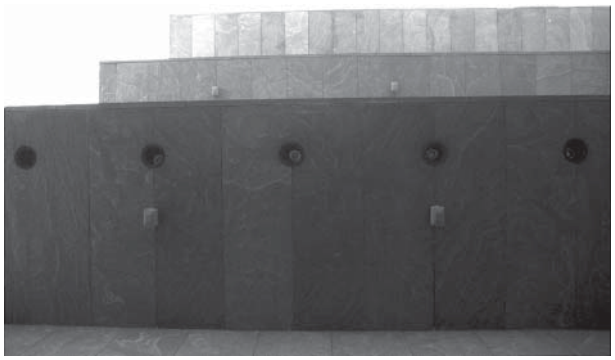

Figure 6. Façade of the Whitney Museum showing the speaker placement for *Vertical Water*.

the sky and the enclosures in the earth reinforced the bass frequencies. I wanted the public to experience a living, distant and removed virtual station. Sonic Architecture and Memory.

Q: You were using the existing acoustics and speaker placement in Berlin to recreate the space of the railroad station. How did you do speaker placement in the work *Vertical Water*? 5th Avenue is a busy place, and I would guess that a waterfall sounds different at the top and at the bottom.

A: In *Vertical Water* this was carefully considered as rows of loudspeakers were mounted on the undersides of the three overhanging sections of the façade, and two sub woofers were placed in benches in the sculpture garden at the base of the building. The presence of Niagara Falls on the Whitney façade was really vertical.

Q: After recording, do you further process the material in order to strengthen the impression you want to give? In *Entfernte Züge*, you are creating the space solely through loudspeaker placement and filtering. Do you sometimes 'fake it' through signal processing, in order to 'compress' an experience into a smaller space?

A: The only processing the material has is that it is equalised to get the most natural sound under the acoustic conditions of a public space. It is important for me to preserve the integrity of the real sound.

Q: You often use sounds from nature to recast our urban environments. Is this reference to nature an important theme in your *oeuvre*?

A: I think what is important for me is not nature as much as having a natural ear.

Q: A focus on listening mode seems to be essential in appreciating your works, and this is similar to some ideas that can be found in much of Cage's music and writings. Can you explain how you are thinking about listening, and how you would describe the natural ear?

A: The natural ear for me is musical listening . . . music as a state of consciousness in which the listener has the ability to discern and correlate musical patterns in the sounds around him. Music for me is a way of interpreting the sounds of the world.

More information about Bill Fontana's work and ideas can be found at his home pages: http://www.resoundings.org, and in Stefan Beyst (2004), here: http://d-sites.net/english/fontana.htm