A paper by JUTTA RAVENNA for The SOUNDART Symposium in The Musical-Clock's Sound Gallery in the Parochial Church Berlin 1998

Where will sound-artists be driven, in their search for spaces in which their works can be produced and presented.

Man has to create une musique d'ameublement, or rather, a music which embraces and utilizes environmental sounds. This is how I envision it: melodious, softening but not dominating the sounds of the fork and knife. (Erik Satie, 1920)

Why should one be thoughtful of the sounds made by forks and knives? Mr. Satie contends this and he's right. Otherwise, music would have to erect walls to protect itself. Walls, which would have to be constantly attended to and which one would have to traverse, even to drink a glass of water, thereby flirting with danger. One question inevitably arises: whether one's planned conduct can be synchronized with the unpredictability of the environment. (John Cage, 1961)

## Contextual Relationship

Several of my works are about putting music in a particular context. The search for a context manifested itself in my search for a space; that is, a real reference system in which the work can be presented. In this process I differentiate between spaces with explicit and active uses, and those without; for example, naturally ambient spaces or idyllic urban waste-lands, architectually void spaces, grown-over railroad yards, abandoned swimming pools, derelict factory buildings, construction and war ruins are all ideal "playgrounds" for undisturbed aesthetic practices. Sometimes it's a particular noise realm; other times, it's the peacefulness which attracts me to a space. Even regularly occuring noise intrusion have fascinated me.

From an optical perspective, it's other characteristics: weather induced patina on facades, the dissolving, chipping and flaking of architectual masonry forms, and time-induced botanical overgrowth of deserted areas: a natural reclaiming process resulting from the germination of airborne seeds from grass, vines and bushes, which incites both nostalgia and inspiration. Eventually, as the acoustic and spacial context, they become important components in the staging of an artistic idea. (This is not a strict inevitability: there are also sound sculptures which are souvereign, which function everywhere, irrespective of the context in which they're presented.)

On the other hand, sound sculptures in functional and active spaces, like bridges, parks, public squares, long-distance and commuter train stations, shopping malls, university campuses, hospitals and schools, afford an exciting integration of art into day-to- day activities. The normal noise level of a site constitutes the acoustic context within which a critical perspective is created, which one either infiltrates or cloaks. Initially, an acoustic evaluation is required, to create compatibility--as suggested by Cage-- planned conduct . . . synchronized with the unpredictability of the environment.

Accordingly, the social context is also immensely significant, as a supra-musical factor, for example, like the occupational, educational or recreational "context" in offices, universities or

parks. These factors become supplemental impulses for musical parameters in my music. Certain social processes necessitate quiet sounds, for example, and vice versa. Some situations dictate sound processes with lots of pauses, to allow the acoustic ambience to surface, while others require perpetual sound fields. I'll go into this in detail later.

With the infiltration of soundart into everyday situations, the location's social structure has become an innate part of the overall consideration; residential superintendents, security personnel, librarians, boat-rental clerks, educators, clerics, and public servants have all become contact-people or opponents of one's artistic undertakings. My decisive question remains: whether social processes have to be considered, integrated, ignored, subordinated or disturbed? The social integration of art often occurs at the expense of its disturbance factor. Frequently, an artistic idea can only be realized for public spaces in some diluted form. Nonetheless, I still espouse the notion that art voices critical commentary to artistic reflexes within social, architectual and acoustic contexts; as opposed to the cliche commonly serviced by art in public areas: pleasing contemplative wit. I don't feel obliged to cater to the "beauty" aesthetic. The sounds and appearance of my sound-sculptures should never serve as compensation for failed or controversial urban architectual planning. Instead, it should make the actual identity and reality of a particular place accessible to the senses, through artistic means.

## Status Quo

The walls which seperate music conceived for secluded concert halls from the ambience of everyday sound-spaces still exist today, by and large. Our ears are accosted by noises haphazardly produced by utilitarian objects, along with noises and sounds from exterior environmental spheres, not to mention the ceaselessness and mindlessness of musak in shopping malls, restaurants, waiting rooms and elevators.

If one chooses to create a listening situation which integrates the space's pre-existing ambience, it is hardly a challenge today to generate accommodating acoustic material, which can then be installed as "a sound installation" in a public space. There are countless opportunities for acoustic interaction hidden within urban noise. The acoustic density created by background noise, like: traffic noise, construction-site noise, layered human chatter, etc., can only be deciphered through infinite patience. In my sound-installations, I attempt to make things "hearable" which are usually masked by normal selective hearing. The noises of the environment thusly become as important as the sounds produced by the sound-sculpture. The word *field*, in my work, references precisely this acoustic context. Far away from the protective walls referred to by Cage, I want to create music which doesn't dominate the space, but rather, which integrates it. A virtual sea of aesthetically naive strollers will pass my sound-installation: a nondescript audience from the multiplicity of world casts and age groups. Under such circumstances *immediacy*, not *explanation*, sets the scene.

Temporary or Permanent: a sound monument?

I've spoken here explicitly of outdoor sound-installations. The occupation of public spaces by sound-art can happen on both a temporary and permanent basis. Often, sound-art is simply a

finite audio event. Acoustic intervention achieved by temporarily installing sounds in public spaces is driven by the critical introspection of an artform which has abandoned the eternity myths. The temporary and finite status creates a transient state in a space, already anticipating the next state. This transient event is established, only to disappear again; an event made possible by the simple law of consciousness: having to move in order to be noticed.

The transient sound-installation's or sound-interVention's historical lineage has its roots in the Events, Happenings and Actions of the 60's and had the intention of mediating or infiltrating. The nature of these interventions reflected sentiments against art being marketed merely as commercial goods, as well as the evolution of the word *art*, which was underway at that time. Permanent infiltration of a space, with a variable or programmable sound-sculpture, would quite likely irritate established and initiate new listening habits. Situated appropriately in a constantly changing environment, such sound-sculptures could infact become the norm. At this point, I posed the question: how long would it take a permanently installed sound-sculpture, even if it's programmed to always sound different, to be overheard in a public space. Quite different from being *locked* inside a concert hall, listeners in urban wildernesses, freed from the forces of proper etiquette, can escape the music at will: the audience's movement, traffic sounds, with its concentrations, jams and resolutions, its tempos and hectic, are all vitally important when experiencing sound-installations. In everyday situations, do they become urban furnishings, *musique d'amemblement*?

Listening situation: examples from my artistic output

A given listening situation is characterized by a variety of factors: the light, fragrance or odor, temperature, humidity, personal significances and noises. I always examine a space and the people there before I start searching for sounds to be used in that space. The architectual, social and acoustic context of the space into which my sound-sculpture is to be integrated generally provides the basic material for my sounds and suggests the manner in which they can be heard. The architectual and functional setting dictates whether lingering, multi-directional rushing, diligent concentration and calm, or strolling can occur. Foyers, revolving doors, hallways, escape routes, staircases, escalators, tunnels, bridges, lanes, streets and paths facilitate movement. Fountain rims and stairs provide seating; while, park benches, pews, public toilets or rowboats on lakes accommodate lingering. Monasteries, lecture halls, libraries, offices, computer centers are spaces for diligent concentration and calm. Lawns and lounge chairs invite one to prostrate one's self. Moving, hurrying, sitting, stooping, laying: new body positions as well as listening positions, in which one can experience the sound sculpture.



**Jutta Ravenna, Quiet Phonemes**, Field 2, Rangsdorfer Lake, nearby Berlin Soundinstallation with floating sound-buoys

My sound-installation *LeiseLaute* (photo 1), with its floating sound- buoys, was installed in 1994 on Rangsdorfer Lake, in Brandenburg. It was part of a group project called *Seestück/Hörstück*, directed by Robin Minard. The public used a pier to leave the shore in rowboats, in which they could listen to and experience the circle of sound-buoys. This novel listen position also *opened* to ears to environmental sounds. The sounds were too soft to be heard from the shore, a fact which inspired the title: *LeiseLaute*. It was quite calm on the lake; so the delicate insect sounds which I used could also be heard.



Soundartist Jutta Ravenna collecting Quiet Phonemes, 1994

I used a similarly quiet space for *LeiseLaute* (photo 2), a few months later in 1994, for an installation in an abandoned gelatine factory (VEB Gelatinewerk), on the out-skirts of Brandenburg. The speakers were hidden from the public in tall grass. My digital crikets mixed themselves (like on the lake) with the sounds of indigenous birds and insects. I tried to be conscious of the animals and to avoid disturbing their communication.



**Jutta Ravenna, Quiet Phonemes**, Field 2, nearby Brandenburg Soundinstallation in an abandoned gelatine factory

In a third scene change, during the same year, *LeiseLaute* (photo 3) was severely compromised in a conventional exhibition situation, overwhelmed by loud sounds ensuing from a neighboring video installation; the result of faulty planning.



**Jutta Ravenna, Quiet Phonemes**, Field 3, University of Fine Arts Berlin, interactive Soundinstallation with extremely soft high frequency insect sounds, which are hidden in a tree trunk, density navigated by ultrasonic-sensors, location-dependent densification 1



**Jutta Ravenna, Noahs Arch**, Musicfestival Brandenburg, acoustic simulation of an increasing water line in an old shipyard, 1994

The visual dimension, that is, the visible part of a location sometimes plays as important a role, when conceiving an installation, as does the choice and transformation of the sounds. I was already carrying the sounds/music for *LeiseLaute* around in my head before I became aware of the spacial context; this was quite the opposite with my piece, called: *Arche Noah* (photo 4). This work, also in 1994, was created for a derelict dry-dock, situated on the Century Bridge in the middle of the city of Brandenburg. The lofty, huge, crumbling-stone room inspired me to acoustically flood it with water sounds. From the floor to the ceiling, I acoustically simulated progressing flooding. The speakers were hidden in sub-terrestrial compartments, ventilation pipes and wall openings (photo 5). In order to take full advantage of the resonating spaces, the water sounds were repeatedly modified until they were tuned to the resonance frequency of the pipes, respectively, which caused them to sing. Pedestrians from the street were occassionally convinced that the dry-dock was flooded. Thusly, a new possibility to experience a "real" dry-dock had been created for them.

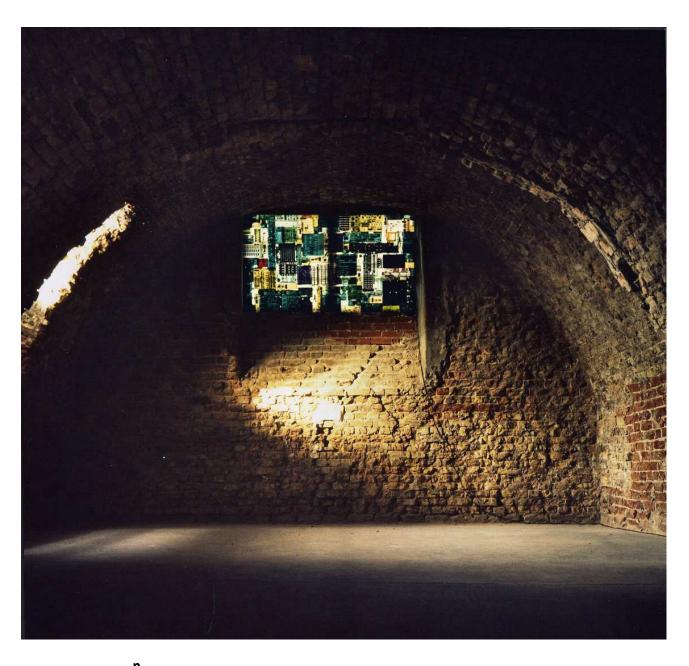


**Jutta Ravenna, Noahs Arch**, into the walls embedded loudspeakers

My works, tailored to a particular space, are conceived for a special situation; but sometimes the opposite is also true: the music is complete and I keep and eye out for an appropriate space. With my music, I don't strive to incite an atmosphere of heightened concentration, conflict, peacefulness, excitement, hypersensitivity or contemplation. Principally, I attempt to redirect the recipients' eyes and ears toward new intellectual, audio and optical perspectives.

Also, the ambience of the space often strongly interacts with the installed sounds. In such instances, unpredictability reigns; so that, often a significant part of the sound design is only possible on-location, where the sounds are fitted to the space. Occassionally, during the fitting, I have to return to the studio to rework the sounds. Frequently, only when the a special speakers, with a special membrane, is installed in a special resonating cavity, in a special constellation--in relationship to the other speakers, in a particular space, can one know how the music really sounds: yet another reason why unconventional and neglected spaces, foreign to exhibition and concert, should be infiltrated.

In 1996, the architectual reality of the Musical-Clock Listening Gallery, in the bell tower of the *Parochialkirche*, proved ideal for the realization of an interactive sound-data control system, with which I had longed to experiment.



Jutta Ravenna, 10<sup>n</sup> Operations in 10 Hours for the Security of a City, Festival Sonambiente, Parochialkirche, singuhr-hoergalerie, Berlin interactive Data-Sound-Window with ultrasonic sensors, location-dependent densification 2

The cylindrical vaulted space provided, ideally, the distances necessary to facilitate audience-triggered sounds; whereby, the restrictions imposed by the long side walls made exact sound tracking with ultrasonic sensors possible. The movement sensitive data-sound-window, installed in the northern window, was ultrasonically triggered from the vaulted space to generate sound-zones with variable timbre, tempos and delay. The participants proximity to the data-sound-window controlled these variables. The nature of a creeping approach or a gay retreat, to and from the window, was dictated by the space. Other attempts, with the ultrasonic sensors in round rooms or completely open spaces, proved personally dissatisfying, in terms of sound

control. This space inspired the title: 10n operations in 10 hours for a city's security.

In concert halls the audience sits at a fixed distance from the stage, musicians and sound sources; although, there are numerous attempts in 20th century music to break out of this strained structure, the orchestra is still bound to its place, the orchestra pit, and the audience still nailed to their seats. My experience has revealed that there are sounds which only sound good from a distance, and others, which require the listener to place his ear almost against the vibrating object. While still others, which sound best when the listener is moving. Additionally, there's the fact that the room sounds differently from every seat. There are good and bad seats in concert halls: differences which an acoustician would neutralize or a sound-artist would amplify. For these reasons, a sound-installation which is conceived for a particular architectual situation offers the listener a new accommodating opportunity to hear the minute details of those sounds and that space. In my three-part work, Welcome to This Church, installed, respectively, in the portal, foyer and library, in the Mathematics Building of the Technical University of Berlin (in 1998), I was confronted with three different situations: an entrance-way, a hallway and a sitting area. The installation was created for the International Congress of Mathematics and consisted of three data-sound- windows, made of semi-transparent computer circuit boards.



Jutta Ravenna, Data-Audiowalk, Field 4, International Congress of Mathematicians, Technical University Berlin, 1998

The sounds in the portal (i.e., mechanical keyboard sounds being produced simultaneously by students at computers, in the university's computer center) were broadcast continuously and unaltered, from speakers mounted overhead, as the congress visitors arrived in droves. The concentration of visitor's traffic was thinned by traversing the portal.



Jutta Ravenna, Data-Audiowalk, Field 4, 1998

Inside and outside oft he building, on the occasion of the International Congress of Mathematicians der TU Berlin



Jutta Ravenna, Data-Audiowalk, Field 4, situation of passage way, 1998

In the hallway, ceiling- mounted speakers, about seventy meters away from arriving guests, were emitting sounds produced by polymeric vibrating relays (i.e., electro-mechanically produced sounds). From that distance, it sounded like rain dripping through the roof.



## Jutta Ravenna, Data-Audiowalk, Feld 4, library, 1998

In the library, all the sounds seemed louder than they actually were: quietly rustling papers, carpet muffled footsteps and whispering voices. In this atmosphere of calm and concentration, a sound-window was installed with scarcely audible sounds produced by electronic data transfer; these could only be heard when the listener's ear was close to the object.

A final comment about my work: in my search for spaces, the search for context manifested itself, that is, a search for real situations into which music could be created. Acoustical, as well as architectual and social contexts are referenced here. The expression *field* is used in my work to describe precisely this ever-changing context, in relationship to sound-sculpture. I've borrowed this expression from the natural sciences. Familiar to us as magnetic field, gravitation field or radiation field, these fields represent physical time-and-place-dependent conditions, whose dimensions and functions create interactive relationships which can be used to describe force dependencies in space, in its entirety. Extrapolated, and applied to music, this means considering non-musical factors. On the one hand, the coordinants of this system allow me to dissolve the divisions which still exist between art and life/art and daily interaction. On the other hand, I'd like to prevent the conditions in which the logic of inner-aesthetic is restricted in the interest of non- artistic parameters. I can also imagine the contrary, that in particular situations, the virtually chemical bonds between the environment and the staging of artistic ideas nolonger function and special *fields* repel sound-art like waterproof fabric.

Jutta Ravenna 1999



**Jutta Ravenna, Speakers' Corner**, Festival Netzwerk-KLANG Hamburg, 2010 interactive sound sculpture for a public parc