

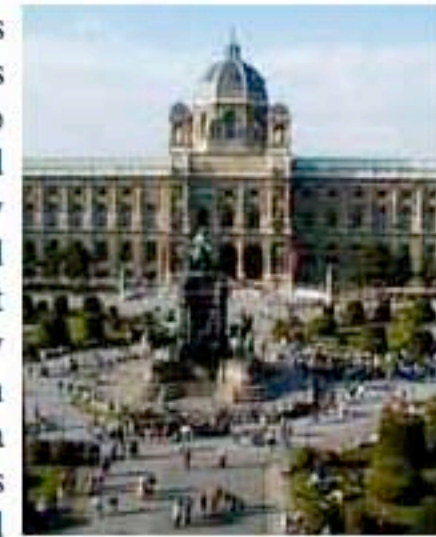


BILL FONTANA

LANDSCAPE SOUNDINGS

In May 1990, ORF KUNSTRADIO, the radio-art program on the National Austrian Radio, and the WIENER FESTWOCHE (the annual international festival of Vienna), collaborated to assist in the realisation of "LANDSCAPE SOUNDINGS / KLANGLANDSCHAFTEN", a live sound and radio sculpture by Bill Fontana. For two weeks, 16 microphones that had been most carefully positioned by the artist captured the sound events taking place in the Stopfenreuther Au, a part of the Danube marshes near Hainburg on the Slovakian border.

By means of a collage of various transmission technologies these sound-events were delivered live to an improvised studio at the Museum of Art History and distributed to 70 speakers, again carefully placed and arranged, along the facades and in the cupolas of both the Museum of Art History and the Museum of Natural History and in the formal garden between them with its monument to the empress Maria Theresia. A stereo mix of the live signals was transmitted simultaneously and continuously to the ORF Funkhaus in Vienna where the producers were free to use the sounds at all times. Within a few days and with increasing frequency the live sounds could be heard on all of the radio channels of the Austrian National Radio. The success was so overwhelming that following a suggestion by Ernst Grisseemann, the radio broadcasting director at the time, the last five minutes of the sculpture were eventually broadcast live on all ORF radio channels simultaneously: for 5 minutes the space of Austrian radio (at the time a monopoly) became the site of a live sound sculpture blotting out any other radio content.



During the 14 days of its realization LANDSCAPE SOUNDINGS developed into a project which paradigmatically touches upon some of the most important aspects of telematic/radio art: the phenomenon of simultaneity as well as the dissolution of the traditional concept of the ('finished') work of art; the co-authorship between artists and non-artists as well as the new definition of the role of the artist who, when preparing his work within the public, i.e. institutionalized domain, becomes an initiator, (project) manager, facilitator responsible for motivating other people involved to find, if necessary, highly unorthodox solutions.

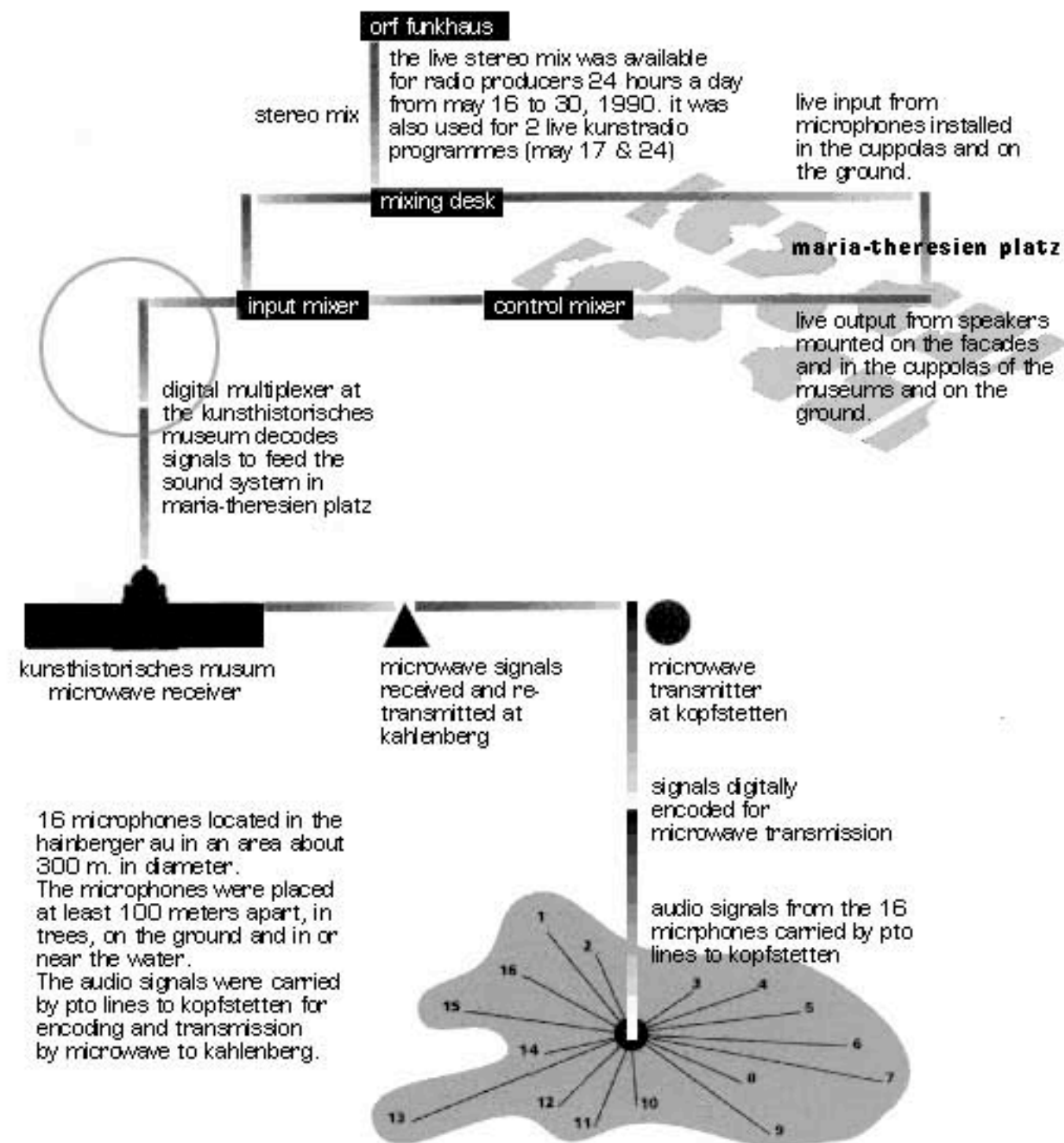
LANDSCAPE SOUNDINGS not only highlighted the poetics of a fragile and endangered natural environment by and through the live transmissions but, by eavesdropping on nature, also addressed the surveillance character of new recording and transmission technologies which are infiltrating every aspect of the social space.

Two CDs were produced by Bill Fontana in connection with the project; LANDSCAPE SOUNDINGS, 1990 and VIRTUAL NATURE, 1994.

heidi grundmann



LANDSCAPE SOUNDINGS signal path diagram

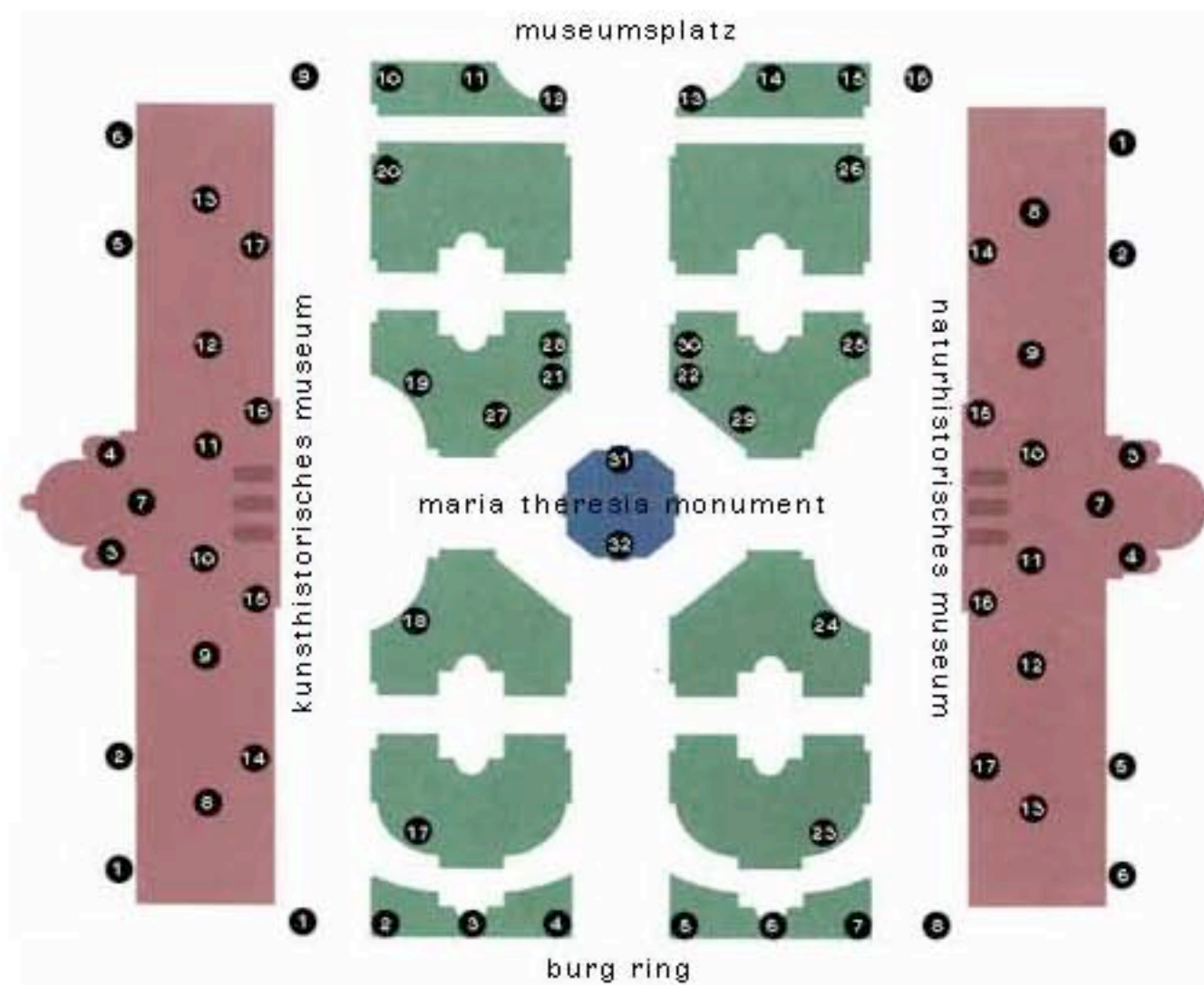


(based on the original project diagram by Bill Fontana, 1990)



LANDSCAPE SOUNDINGS

maria-theresien-platz : speaker plan



distribution of the loudspeakers in the maria-theresian-platz and the sounds they play

- on the facades of the museums:
- 1-14 and 17: **bird sounds**
- 15 and 16: **sounds from the rotundas** (foyers) of the museums
- in the maria-theresien-platz:
- 1 - 8 and 9 - 16: **"water curtain"**
- 17 - 30: **frogs**
- 31 and 32: **bird sounds**

Visitors entering the Maria-Theresien-Platz from either the Ringstrasse or the Museumplatz pass through a "curtain" of live water sounds from the Hainburger Au. These water sounds mask the existing acoustic background of traffic noise. Upon walking further into the Maria-Theresien-Platz visitors hear the sounds of various frogs and insects coming from loudspeakers hidden in the ground level lighting wells.

From the facades of both museums come the calls of many different kinds of birds. These sounds from the two parallel museum facades echo across the wide space of the Maria-Theresien-Platz, becoming themselves transformed by the acoustics of the architectural context.

Loudspeakers placed within the rotundas of both museums play the sound of birds which echo inside the resonant acoustics of these vast interior spaces. Microphones are placed within each of these rotundas and transmit the resonant acoustics of these interior spaces to loudspeakers mounted on the museum facades at ground level, on each side of the entrance, so that visitors approaching each museum can hear the reverberating intonations of the museum buildings.

LANDSCAPE SOUNDINGS



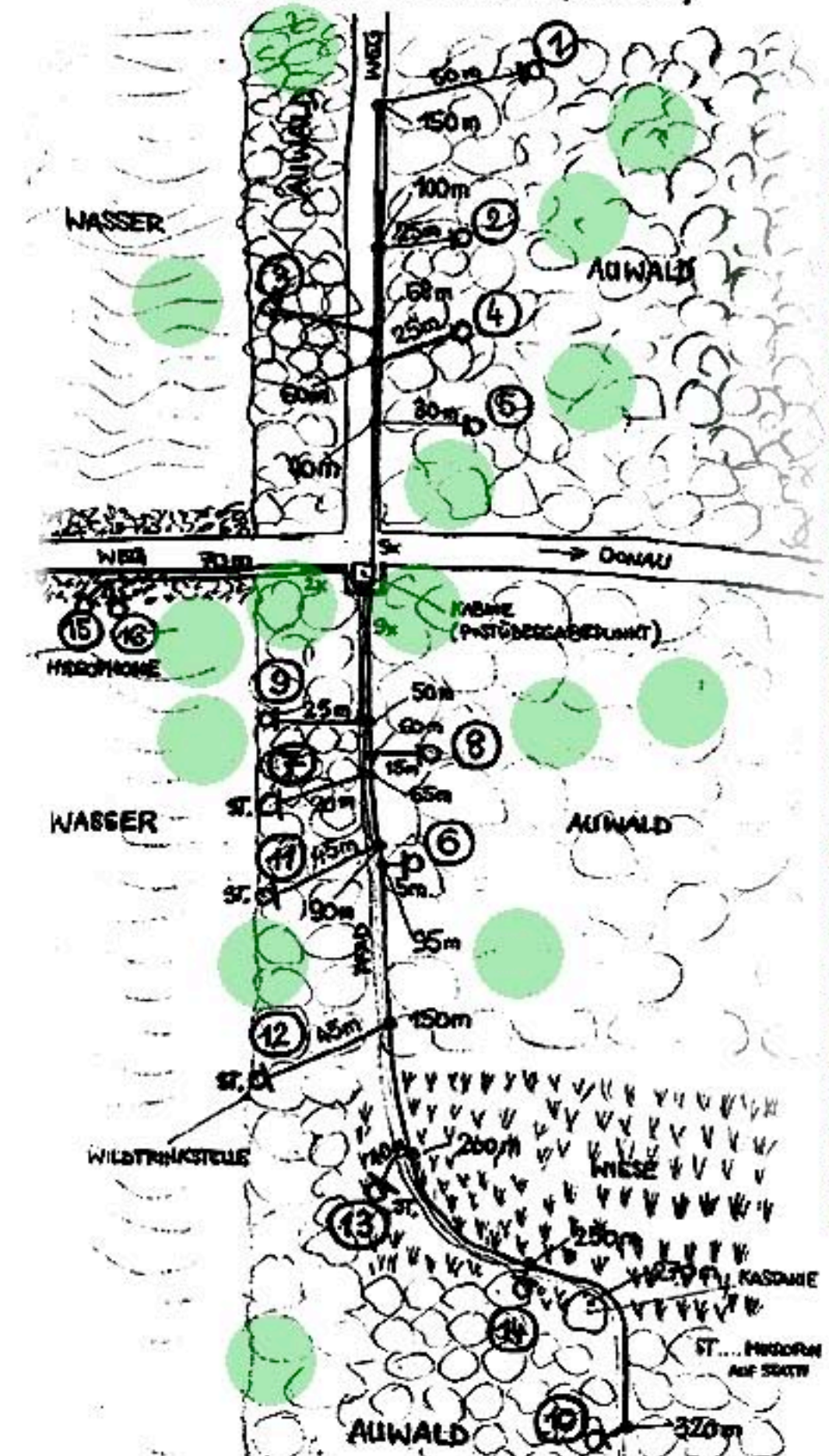
Bill Fontana in the Stopfenreuther Au

This drawing shows the arrangement of the 16 microphones in the Stopfenreuther Au. The drawing was made by ORF sound engineer Gerhard Wieser who designed the technical installation and collaborated with Bill Fontana in the installation of the microphones. Wieser's drawing also shows the different distances between the different mics and the central connecting point - distances which caused delays in the reception of sound from different mics. These delays produced a 3 dimensional effect of space because a distinct sound would be picked up from mics located in different places in the au.

Photos of the installation and some Real Audio files can be seen and heard by clicking on the green points in the drawing.

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KLANGLANDSCHAFTEN - MIKROFONE BEREICH STOPFENREUTHER AU (ORF-WFN)



drawing of microphone placement and distances to connecting point with the PTo network by ing. gerhard wieser

Microphone Placement

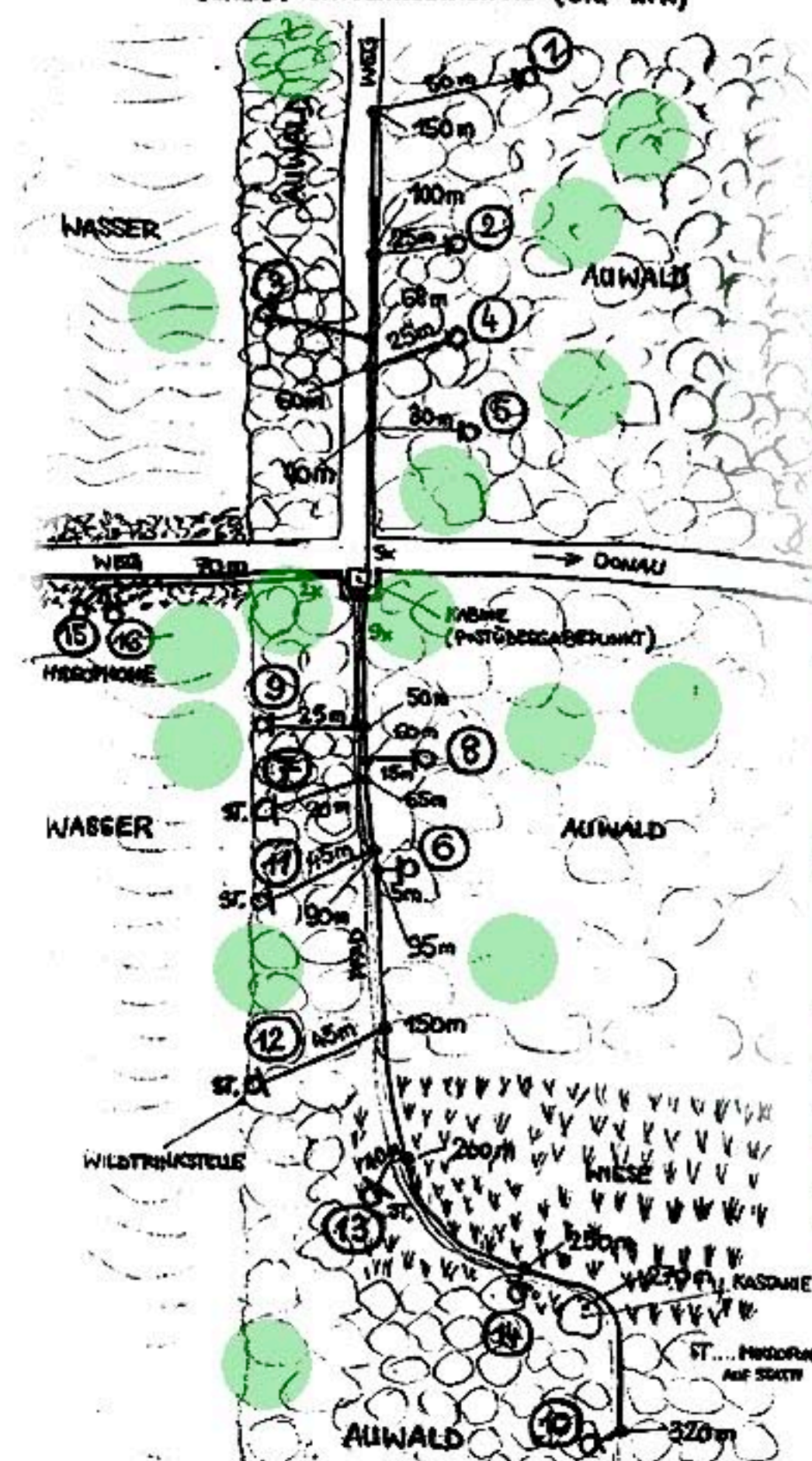
The individual microphones are distributed at intervals of least 100 meters apart. The most extreme distances of the first to the last microphone are more than one kilometer.

When you divide these relative microphone distances by the speed of sound (330 meters per second) a potential time structure is created that describes the movement of sounds through the Au landscape that is mapped by the microphone positions. The longest acoustic delays occur in relation to sounds that are loud enough to travel through the Au landscape to the most widely separated microphones. Nightingales, woodpeckers, crows, blackbirds, thrushes, ducks, cuckoos, jays, titmice, finches, redstarts and herons are loud enough to echo through these furthest microphones.

Sometimes these microphone installations hear echoes created by the nearby human presence and, although the microphones are as far away as possible from the sounds of aircraft, traffic and trains, they occasionally enter the microphone configuration. Thus, the distant airplanes may become like a flying organ, as each microphone hears its Doppler shifting engine harmonics with different pitches. Train and boat whistles as well as church bells can sometimes be heard reverberating through the landscape.

bill fontana

KLANGLANDSCHAFTEN - MIKROFONE BEREICH STOFFENREUTH AU (ORF-NFN)



drawing of microphone placement and distances to connecting point with the PTö network by ing. gerhard wieser



LANDSCAPE SOUNDINGS

A RADIO SCULPTURE

Bill Fontana's Landscape Soundings / Klanglandschaften was a radio project in two ways: 1) radio (microwave) was the means of connecting the live signals from the microphones in the Danube marshes to the temporary studio in the Kunsthistorisches Museum and 2) the sounds from the marshes were experienced throughout Austria as a radio sculpture broadcast by the ORF (Austrian Broadcasting Corp.).

In the original concept, Bill Fontana planned only to create two 45 minute live mixes for the weekly KunstRadio programme (Thursday night at 22:45) during the event and produce short live mixes on the same days for other programs on Österreich 1, (the ORF cultural programme). However it was soon discovered by the producers of the early morning programme that the live stereo feed, from the Kunsthistorisches Museum to the radio studios of the ORF, was available 24 hours a day and the producers of other programmes soon followed.

So for two weeks the real-time sounds of frogs, birds, water, thunder-storms and, sometimes, hikers became integrated into every kind of broadcast - weather reports, talk shows, pop and cultural programs, etc. By the end of the fortnight, the sounds had become so popular that the radio director decided to have the last five minutes of the sculpture transmitted live on all three channels of the ORF - which meant all the radio channels in Austria because, at that time, the ORF still had a radio monopoly.

THE KUNSTRADIO BROADCASTS

The two live 45 minute mixes for the Kunstradio broadcasts ([Thursday May 17th](#) and [Thursday May 24th 1990](#)) presented the artist and the listeners with the problem inherent in the flow of time in nature which is quite different from broadcasting time. At 22:30, the time of the broadcasts, nature - with the exception of frogs and a few night birds - was asleep. In addition, the live mix, for second broadcast (May 24) was partly drowned in the white noise of a torrential rain, obliterating all other night sounds.





BILL FONTANA

Landscape Soundings

The city of Vienna epitomizes the meaning of what the contemporary urban environment of a European city can be. It has all the cultural and urban elements one would expect to find in a great metropolis. Against this contemporary urban setting, the starting point for this sound sculpture is a question, what was Vienna before it was Vienna ? What was Vienna in its original and natural state before it was an inhabited area?

Today, the answer is to be found in the eastern part of Austria and in Hungary along the Donau. There are river wetland forests, the "Au", that are the last remnants of the original Donauauen that extended east from the Wienerwald into what is now Hungary.

These Donauauen near Hainburg contain extensive river wetland habitats that in the springtime are full of the many sounds of birds, frogs, insects and moving water. The Donauauen can be used as a rich natural resource of environmental music.

"Landscape Soundings" uses the Donauauen as such a musical resource. This is accomplished by placing microphones at many different locations in the Donauauen north of Hainburg and simultaneously transmitting the sounds to a sound sculpture location in Vienna, the Maria-Theresien- Platz.

The idea for this project was inspired by the circumstances of the Maria-Theresien-Platz. This long rectangular park is situated between two massive architectural structures, one devoted to Art History and the other devoted to Natural History. Standing in the middle of Maria-Theresien-Platz it was quite natural to imagine possible relationships of this formal park to the issues of Art and Nature, Man and Nature, ecology and so forth. This led to the original question about the natural origins of Vienna, and what this formal park may have once sounded like several thousand years ago.



The idea of returning Maria-Theresien-Platz to its original, natural, pre-cultural acoustic state is not a rejection of the contemporary urban and cultural context. It is an attempt to define a new and vital link between an ecological sensibility, an aesthetic sensibility and the meaning of urban public space.

The presence of "Landscape Soundings" transforms Maria-Theresien-Platz into an open air museum. A museum that is not preserving the past, but helping to preserve the present by stimulating a public awareness of what had recently been an endangered habitat. Hainburger Au became a famous place in Austria as the winter 1984 site of great and heroic demonstrations intended to save the trees from being destroyed and displaced by a hydro-electric station. In 1990, it will probably become Austria's first national park. In this recent historical context, the idea of relocating it to the center of Vienna is meaningful.

The acoustic transformation of Maria-Theresien-Platz is realized by installing many loudspeakers at various points at ground level, on the facades of both museums and within the rotunda of each museum. When possible, the visual presence of these loudspeakers has been minimized, so as not to disturb the normal visual aspects of Maria-Theresien-Platz. All of these loudspeakers play live sounds from the Hainburger Au.[1] Visitors entering the Maria-Theresien-Platz from either the Ringstrasse or the Messepalast pass through a "curtain" of live water sounds from the Hainburger Au. These watersounds mask the existing acoustic background of traffic noise. Upon walking further into the Maria-Theresien-Platz visitors can hear the sounds of various frogs and insects coming from loudspeakers hidden in the ground level lighting wells. From the facades of both museums come the calls of many different kinds of birds. These sounds from the two parallel museum facades echo across the wide space of the Maria-Theresien-Platz, becoming themselves transformed by the acoustics of the architectural context. Loudspeakers placed within the rotundas of both museums play nightingales and other song birds which echo inside the resonant acoustics of these vast interior spaces. Microphones are placed within each of these rotundas and transmit the resonant acoustics of these interior spaces to loudspeakers mounted on the museum facades at ground level, on each side of the entrance, so that visitors approaching each museum can hear the reverberating intonations of the museum buildings.

My purpose in installing "Landscape Soundings" (with its live sounds from the Au) in the public space of the Maria-Theresien-Platz is not intended to be a romantic return to nature. It is intended to be a radical transformation of the acoustic meaning of this public space. The acoustic qualities of the Maria-Theresien-Platz will also transform the natural sounds from the Au because of the sonically reflective presence of the two parallel museum buildings.

"Landscape Soundings" also has a life on the radio. At various times of day, I am realizing live mixes of short duration for the ORF. For the program "Kunstradio-Radiokunst", I am also realizing some late evening mixes of longer duration. In all of these radio versions of "Landscape Soundings" I mix and compare the original sounds of the Hainburger Au with their acoustic transformation by the Maria-Theresien-Platz. As a radio sculpture, "Landscape Soundings" also acoustically interacts with thousands of different listening situations throughout Austria that are instantaneously reached by these radio broadcasts.

"Landscape Soundings" simultaneously listens from 16 microphone locations and transmits these sounds to Vienna at the Maria-Theresien-Platz.

The individual microphones are distributed at intervals of least 100 meters apart from each other. The most extreme distances of the first to the last microphone are more than one kilometer. When you divide these relative microphone distances by the speed of sound (330 meters per second) a potential time structure is created that describes the movement of sounds through the Au landscape that is mapped by the microphone positions. The longest acoustic delays occur in relation to sounds that are loud enough to travel through the Au landscape to the most widely separated microphones. Nightingales, woodpeckers, crows, blackbirds, thrushes, ducks, cuckoos, jays, titmice, finches, redstarts and herons are loud enough to echo through these furthest microphones. Sometimes these microphone installations hear echoes created by the nearby human presence. Although the microphones are as far away as possible from the sounds of aircraft, traffic and trains, they occasionally enter the microphone configuration. Thus, the distant airplanes may become like a flying organ, as each microphone hears its Doppler shifting engine harmonics with different pitches. Train and boat whistles as well as church bells can sometimes be heard reverberating through the landscape.

*"The clear voice
of the fulling-block echoes up
to the Northern stars"
Basho*

HEIDI GRUNDMANN

Eavesdropping on Nature

For "Landscape Soundings" Bill Fontana asked the technicians of the ORF (Austrian Radio) to install an audio surveillance system with 16 microphones in the Stopfenreuther Au: the subjects of the surveillance being birds, frogs, water, airplanes, church bells and people casually passing by. The surveillance system registered all the acoustic signals and data within its range around the clock for 14 days. The microphones were connected to 16 telephone lines provided by the OPT (Austrian Post and Telecomm). The phone lines



led to a 16 channel microwave transmitter installed by the ORF which sent the signals to the microwave antenna on the Kahlenberg and re-transmitted to the Kunsthistorisches Museum.

The microwave transmission was actually two video channels which were divided into smaller units to provide the 16 audio channels. The signals were then decoded into sound-frequencies before being sent to the 70 loudspeakers located on the Maria-Theresien-Platz and on the facades of the Museums.

Fontana carefully planned both the installation of the microphones in the Au and that of the speakers in the cupolas of the museums and in the square, and aligned them so that space could be delineated with the help of sound. In the Au, these drawings - in the sense of an objet trouve - emerge as a matter of course: woodpeckers in the background, a wild boar coming closer, insects buzzing around a microphone, an airplane passing over high in the sky, and above all, the far-carrying bird calls passing rapidly from one microphone to another as they rippled out over the Au. In the Maria Theresien-Platz on the other hand, the disembodied, transmitted sounds were made to arrange themselves to create a resonating space, a sculptural space, and the sculpture thus created, while being made of many different spaces was, most of all, the space between the Maria-Theresien-Platz and the Stopfenreuther Au - the space of simultaneity.

Bill Fontana used the psychological situation of the live radio experience of being in two places at the same time: on a rainy morning the real-time sounds of rain falling in the Au and the reaction of the Au animals to the rain resounded from the loud-speakers in the Maria-Theresien Platz. It was by means of the experience of this simultaneity that the space between the Au and the Maria-Theresien-Platz could first be perceived as the difference between the two locations (the site of the origin of the sounds and the site of their reception).

In Bill Fontana's, "Landscape Soundings" the space of the real-time, analog radio broadcast and the electronic space of digital communications technology overlap, defining two completely different views of the world - and the sculpture was layered in a similar way. In the foreground was the plane of narration, a linear, acoustic live story which, following the course of day and night, unfolded itself in time. In the background, behind this linear narrative (a relic of industrial culture ?) a door opened as in a surrealist painting (or nightmare), a door to the electronic space of simultaneity which threatened to undermine, even to replace, the linear certainties of the industrial age. This space is about the simultaneous, instantaneous and potentially universal availability and recallability of data which is available and recallable in the instant of storage; and which produces an equivalence between users (of electronic data systems) no matter how far apart their terminals are located from each other. Digital data are even further disembodied, relative to analog data transmission technology, because they are stripped of their identification with any specific perceptual sense organ and can be just as easily recalled (see "video microwave transmission" above) as sounds or as diagrams: that is, in whatever forms the technology can provide for our

or as diagrams: that is, in whatever forms the technology can provide for our senses to perceive. (In this sense there is no original source of data - all data locations have the same value.)

Thus "Landscape Soundings" did not create an illusory space or image "Au" on the Maria Theresien-Platz, nor did it create an image which would be produced "better" or "more beautifully" with the help of recorded (i.e., predictable in sequence and mixture) sounds. Rather, it concerned the image of a world in which information is constantly being shifted, recalled from one context to another: it dealt with the concept of a simultaneity in many locations, which has superseded the concept of time as sequence. It concerned the image of a world of remote control, whose present is composed more and more of recorded information recalled from the distance, monitored in the distance, becoming a new space of simultaneity (and no longer composed of that which takes place in succession at the individual's respective locations as narration in time).

On at least two days, a stereo line set up for the project was activated from the sound mixer in the Kunsthistorisches Museum connected to the broadcasting center: time and again, "Landscape Soundings" became a live radio sculpture in the course of a normal broadcasting day of ORF radio. Bill Fontana mixed the sixteen signals from the Au with recordings of their echoes on the Maria-Theresien-Platz and other live parameters. His mixture was broadcast live to all Ö1 radio listeners: each listener received his or her own sound sculpture according to the (acoustic) context in which he or she is listening. Contrary to the norm, radio was not viewed by Bill Fontana as the source of information, entertainment, or culture but rather the place of occurrence (living room, kitchen, car, walkman) in which the sounds (mixed by him) arrive - and where they are mixed with the existent acoustic environment, creating a new sculpture. The completion of this sculpture however requires the recipient's active participation in Duchamp's sense of the term. Yet the analogous past and the digital present and future once again overlap: one's attention is directed towards a device broadcasting data and located in a space which we perceive as a personal living room, work room, transportation room, or simply as a listening room. This intimate niche of personal freedom reveals itself as an anachronism, for devices which receive digital sound can very easily broadcast information back out again, even when it is (provisionally) just to provide reception research with data on the frequency of use concerning specific programs. The car - and even man himself - have long since become information carriers because spatial position, personal history, bank statements, state of health etc. have all become recallable data (the Graz artist, Richard Kriesche, calls man in electronic space, "radio man").

The monitor and surveillance situation in the Au, which among other things can also be read as an image of monitored fields, monitored weather, monitored living creatures in research groups of all kinds, comes full circle to the urban society structured by electronic technology: we see a unified world in which differences between technology and nature (to which man also belongs) or even between art and nature are dissolved in the artificiality of data.

When one defines radio art as an art which makes visible the specific characteristics of the medium of radio, of the radio space as such, then "Landscape Soundings" is exemplary for this kind of media art. Beginning with the live broadcast from a barely accessible area with the help of microphones, hydrophones, telephone lines and directional radio to the live mixing and live transmission - and ending with the studio production and broadcast of selections from a CD, a diversity of broadcast, recording, and transmission methods, indeed a broad palette of contemporary radio technology is thematicized. Everyday radio is roughened, brushed against the grain not just through a pre-existing, yet unusual content, but above all through self-reflection, which according to the artist's concept, is built into the project during all its phases, and through the positioning of radio in the new electronic space.