# MAX NEUHAUS: PIONEER OF INVISIBLE AND (ALMOST) INAUDIBLE SOUND INSTALLATIONS

Walter Cianciusi Conservatory Luigi Canepa Sassari, Italy

#### **ABSTRACT**

After a career as performer, the virtuoso percussionist Max Neuhaus went on to pioneer artistic activities outside conventional cultural contexts and began to realize sound works anonymously in public places, developing art forms of his own. Utilizing the sense of sound and people's reactions to it that he acquired after fourteen years as a musician, he began to make sound works that were neither music nor events and coined the term "sound installation" to describe them.

With the realization of these nonvisual artworks for museums in America and Europe, he became the first to extend sound as a primary medium into the plastic arts. Four years after Neuhaus' death this paper proposes an in-depth analysis of his masterworks as well as a reflection on the boundary conditions that led to such an extreme and original proposal.

## 1. MUSIC/INSTALLATION

Actually, the first assumption that many people do is that the sound installations are some kind of new form of music. In fact, some artists have started to use the term for what are really long-term concerts of taped sounds.

The sound installations by Max Neuhaus differ in two principal ways from music. One is that they're not a succession of sound events in time, which is one of the basic definitions of music: a series of sound events that progress from one to the other and that draw a line in time. People don't come to a sound work of Neuhaus at the beginning and leave it at the end. He builds sound continuums without beginning or end.

The other difference is that the sound is not the work; the sound is the material that Neuhaus make the place out of, that he transforms the space into a place with. So recording the material and playing it back somewhere else is as silly as taking the paint off the canvas and thinking it's still the painting [1].

The social context, the physical context, the architectural context, the acoustical context are Neuhaus's building blocks; they're bricks and mortar. They don't determine what he builds; they are what he builds with.

Unlike many composers who create in isolation and then take or send their pieces to be played in a variety of circumstances, Neuhaus went first to the situation or environment and designed a piece specifically tailored to fit the needs and likes of the space. He concentrated on expanding our conception of where and when one can enjoy music, and even what music is [11].

#### 2. IN SEARCH FOR A PROPER OCCASION

Since 1966 Neuhaus' activity, following certain situationist and minimalist trends, has been turned toward the search for occasions: unique contextual events permitting the realization of a sonority that extends its field to a public and intersubjective process. To speak of 'occasions' here means leaving behind the rigidly prescriptive territory of music and hunting for unknown and unpredictable situations where the sounds can rise up and come to life, proliferate and die.

Thus 'occasion' does not mean casual chance, but the determined search for a target that presents itself to sight and hearing, as a sudden and unexpected clarity.

The occasion denies the interchangeability of situations. Neuhaus projects and adapts himself in relation to the unrepeatability of each space and time, just as it is found or offered. Invited by the Albright-Knox Gallery of Buffalo in 1967, he took as the basis of his work Drivein Music the virtual 'corridor' beginning at the entrance of the museum and developing over approximately onehalf mile along Lincoln Parkway. The work consisted of a number of radio transmitters placed along the entire stretch of road and heard by drivers and their passengers over the car's radio, who could change their perception by altering the speed of their vehicles. The subject here is a passage: either of sound emerging from nowhere, or of an aural tunnel causing a sonic architecture to appear as an extension from the real building (the museum), or of the driver/passengers who effect an interchange, or of the celebration of a circumstance or an occasion, which passes and disappears [7].

The occasional sound is seductive because it is connected to a perceptual surprise - in the literal sense of something that grips you suddenly, without warning - and a temporary intoxication.

## 3. NO VISIBLE COMPONENTS

Neuhaus' sound works have no visible component. If the sound sources cannot be placed out of sight, Neuhaus makes them look like something else: in a context where people assume the work is visual, it would be silly to propose a loudspeaker as an artwork.

We know that the aural and the visual are complementary perceptual systems. Ear is complementary to eye; each one fills in holes in the other's picture. People say that since the invention of the printing press we've become more and more visually oriented. Before that, history was aural. If we go back to very early man, survival depended in many cases more

on the aural than the visual; in a forest we could hear danger further than we could see it. We've turned ourselves over in some ways; still, our aural mind is by no means in a state of atrophy. The fact that we can speak and understand language is an incredibly complex aural feature. That we can further distinguish the difference in origin of a person from the way he speaks—this is a level of nuance that still can't be analyzed by computer science. We can't measure it, yet everyone does it without thinking. Vision is more conscious than hearing, but that doesn't mean the aural is less powerful. We think about our eyes, we're more conscious of what we see. Most of us while listening to someone talk don't even realize we're hearing.

Ear is a more direct channel to the unconscious [5].

## 4. BARELY AUDIBLE

One important idea in some Neuhaus' major works is that the sound seems barely audible at first.

It shifts us from visual to aural, the low sound level is a mover.

These works are a nice challenge for a premise: that we hear space as well as see it. Although we generally feel that we perceive space visually, we also perceive it though our ears; our sense of the character of a space comes as much through our ears as eyes. The aural is a dimension that is as powerful as the visual, although less conscious. Like many artists Neuhaus is interested in communicating with the mind, but instead of appearing in its eye window he chooses to appear in its ear window. Working in that window, but outside the codified aural languages of the verbal and musical, one finds oneself on an avenue to the mind which is free of cultural baggage, it's fresh territory [1].

#### 5. THE QUESTION OF ANONIMITY

Whether or not Neuhaus made a work anonymous has to do with the context. Not all his works are anonymous. In 1977 Neuhaus constructed his first permanent piece of sonic architecture. In the middle of Times Square in New York, he built a sound volume defined by sonic walls bordering the ventilation grillwork of the subway, a perfectly transparent prism of sound rising up an indeterminate height from its base. immaterial, the construction aimed at permanence, seeking to create an aural space cut out from the noise generated by the traffic. With its constructive idea, the work is meant to face and overcome the challenge posed by the destructive aspect of the city. It fights on the same terrain but produces 'difference', cutting through the chaotic transmission of urban sounds with a carefully designed and elaborated sound that can be received by any city dweller.

The complex of sounds are deduced from the environment, built through the use of a computer-controlled sound palette, an instrument that Neuhaus employs to model the physical structure of real sound, to modify and develop it such that his sound is finally different from the real one.

Thus the computer is not used to generate new sounds, but to mold reality, which nonetheless remains similar to itself.

Times Square's anonymity is a doorway, an entrance to this work. The dilemma of having no way to explain this sound is a stimulus at first provoking curiosity; you think it almost could be an accident, but it doesn't sound like an accident, and before you know it, you're in it.

The work is located on a pedestrian island: a triangle formed by the intersection of Broadway and Seventh Avenue, between 46th and 45th Streets, in New York City's Times Square.

The aural and visual environment is rich and complex. It includes large billboards, moving neon signs, office buildings, hotels, theaters, porno centers and electronic game emporiums. Its population is equally diverse including tourists, theatergoers, commuters, pimps, shoppers, hucksters and office workers. Most people are in motion, passing through the square. The island, being the junction of several of the square's pathways, it is sometimes crossed by a thousand or more people in an hour.

The work is an invisible unmarked block of sound on the north end of the island. Its sonority, a rich harmonic sound texture resembling the after ring of large bells, is an impossibility within its context. Many who pass through it, however, can dismiss it as an unusual machinery sound from below ground. For those who find and accept the sound's impossibility though, the island becomes a different place, separate, but including its surroundings. These people, having no way of knowing that it has been deliberately made, usually claim the work as a place of their own discovering.

Most of the people who don't know what it is take it as a beautiful anomaly in the city that they found, something which is inadvertent, which they take as their own. In the same way that perhaps they might find a window in a building that, at a certain time of day, happens to reflect light in a special way.

Neuhaus had to fight to keep the Times Square work anonymous. Its sponsors thought it just an eccentric artistic whim that he didn't want a brass plaque imbedded in the sidewalk.

Its anonymity is its entrance, it's what engages the gears. It places its discoverers in the dilemma of no having way to explain it. It must be an accident, but it doesn't sound like an accident.

Neuhaus's work involves what one might think of as minimal displacements of the real rather than replacements of it through the insertion of contrived artistic entities, which carry their own imperatives and inducements. It is central to the enterprise, accordingly, that one should merely happen upon the sounds; discover them as unexpected aural presences or aural absences [9].

## 6. PUBLIC ART IN PUBLIC SPACE

When Neuhaus first became interested in working in the public domain in the mid-sixties, there were practically no other contemporary artists working in the field; no one was interested. Instead, they were all struggling to

get their work into museums. Now it's become an industry.

All art is, in one sense, site specific. Traditional art forms are specific to the very consistent site of the museum and its sculpture garden. It's not that museums aren't different, but the paintings are usually hung on white walls and sculpture is most commonly shown on grass.

When we move to another site, it demands that we develop new forms. The world outside the museum is not a sculpture garden. We cannot, but more importantly we should not, try to make it one. The new forms also must respect the fact that these places are a public domain, they belong to the public.

A work like Times Square is not making the assumptions that most public art does. It can either be perceived or not. In these works there is no idea of confrontation; there is no idea of forcing people to change their consciousness. It seems to be something that is so discreet that it can be easily ignored; and if you don't want to ignore it you can hear it, you can listen to it, you can make use of it.

Most public art which is site specifically placed in a "cityscape", in the middle of an urban context, starts from assumptions about the public, from assumptions about a problematic situation, from assumptions of the necessity of criticism towards a given situation. Works like the Times Square and the Time Piece in Bern do not make such assumptions. As public art they can either be perceived or not. The artist leaves it open if somebody is willing and attentive enough to perceive the work. There is no confrontation.

There is no idea of forcing people to change their consciousness.

One of the main problems with contemporary public art is a naive attachment to the idea that if it is public, it has to be spectacular. The early works of Neuhaus were about dealing with a public at large, a wish to remove oneself from the confined public of contemporary music. It came from a deep belief that it's possible to deal in a complex way with people in their everyday lives. Not making a simple piece for a simple public but making something very special, accessible to anyone ready to pay attention.

Times Square, as a work of public art, it is exemplary in excluding no other uses to which its island might be put [9].

#### 7. SELECTED WORKS

## 7.1. Water Whistle

In 1971 listeners were invited to immerse themselves and actually swim in a pool brimful with water, at New York University. Discovered through the immersion in the pool, the unexpected character of the sound from Water Whistle (a series of hoses forcing water through whistles to make pitched sounds underwater) broke through the everyday context with a marvelous event, something seductive and magical: the whistle completely surrounded you with sound. Because of the way the forehead transmits sound waves to the ears underwater, you almost felt as if the sources were inside

you. It was an all-encompassing sensation. The aural structure was based on a grid of sound sources around a limited perimeter, each swimmer being invited to seek out his or her own sonic pattern without any preestablished schema.

Such a sound quest thrives on the occasion provided by the architectonic territory - the pool - as well as on the occasion and chances of the swimmer's movements [3].

## 7.2. Time Pieces

The first in the series of Time Pieces, realized in 1983 on the occasion of the Whitney Biennial in New York, operated precisely on the discovery of the sound work in its absence.

Constructed in a sunken plaza in front of the Whitney Museum, the piece consisted of a subtle 'crescendo' of live urban sounds and noises, filtered once again through a computer-controlled sound palette: moving cars, horns, squealing brakes, motors revving up and accelerating, in short an ensemble of sonic information from Madison Avenue, the street that fronts the museum. The crescendo dispersed into the real sounds, but when it disappeared it revealed its presence, offering new occasions to perceive the city.

This dispensing with a definable something, this use of something purely as a preparation for the moment when it is removed, perhaps recalls the phenomenon of negative sculptures - as if the relativity of zero had been displaced, as Walter de Maria did in his Vertical Kilometer of Earth [6].

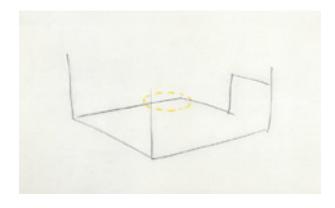
# 7.3. Infinite Lines From Elusive Sources

The idea of an elusive source separates it from most of other Neuhaus' sound installations. The idea of actively seeking the source as opposed to a fixed aural topography is one of the major differences.

The source in the Hussenot work switches location as you approach it. In the Persano piece it appears and disappears as you move around the space [2].

The sound used for this piece is a click-like sound.

He defined it by writing a program that causes it to develop endlessly, to never repeat itself, to continually change, to evolve.



**Figure 1**. The sketch for Infinite Lines From Elusive Sources.

It's a statement of idea, written in the language he used to control the generation of sound. It has a dimension that an idea on paper - a drawing or text - doesn't have. It's a statement but it's also the reality, a dynamic embodiment of idea.

#### 7.4. Two Identical Rooms

It took two wings of a very large exhibition space and transformed them with two different sound textures which were opposite in nature. One side was almost a fluid, in that it enveloped you. The other side was formed with a texture of very dense clicks which seemed to be suspended overhead. Both of the sounds were at levels that require focus. When you walk into the space, the room looks empty and you hear nothing special.

After a minute or so, though, your aural focus shifts and you suddenly realize you're in one of these textures.

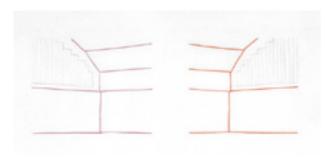
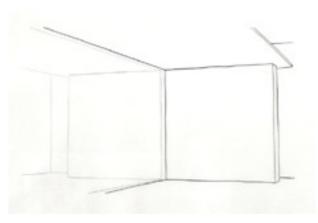


Figure 2. The sketch for Two Identical Rooms

## 7.5. Two Sides Of The Same Room

One room was divided into two halves by a wall. Here, the sounds were so similar that on first hearing it was difficult to tell them apart. Only after spending some time on each side did it become clear that each side evoked a very different frame of mind, but even then the difference between the sounds was hard to identify. The work took the same room and made it into two opposite places.



**Figure 3**. The sketch for Two Sides Of The Same Room.

## 7.6. A Bell For St. Cäcilien

A piece created in Cologne, next to the de-belled church of St. Cäcilien, now a museum for medieval arts. It consists of a disembodied bell sound that materializes out of nowhere in the little park that the former church flanks. It is like an aural memory of the edifice's former function [9].



Figure 4. The sketch for A Bell For St. Cäcilien.

#### 7.7. True Sounds

In other cases, the anti-metaphysical approach leads to a sound that is 'fitting' to the social dimension, a design that results in a 'true' sound, one that serves society, adjusting to it and becoming a usable innovation, beyond its aesthetic and sensory quality. Still in 1979, Neuhaus adjusted the alarm clock to the sensibility of the sleeper who wants to wake up at a certain time. He designed a sound that does not disturb sleep, but whose disappearance and subliminal absence strike the sleeper and bring about awakening. What counts here is not the form or presence of the sound, but its efficacy.

Another such case: the 1978-1989 project for new siren sounds for police cars.

At times the integration of sound and place reached a point of maximum identity between space and volume, level and surface, such that a continuous sound texture could construct a wall or define a passageway.

#### 8. SCORES

Neuhaus was not interested in literally translating what he was hearing into something visual. His drawings use image and words to talk about his sound works. Usually the sound is not drawn, though. Often it is a blank space in the image panel left for the viewer's imagination to fill in.

For many years the phenomenological description of the entire process relied only on the preliminary sketches and on an account of the listener's experience. But around 1974, Neuhaus made the decision to confide a 'demonstration' of the work to drawing.

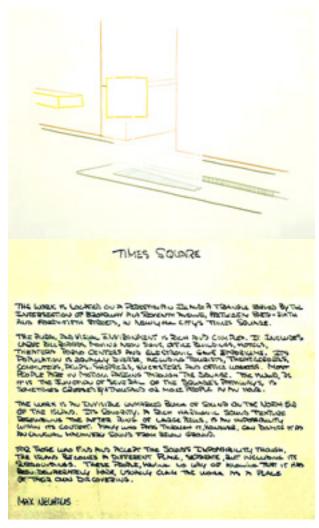


Figure 5. The score of Times Square.

The hypothesis was that of attempting an exhibition or visual explication of the interpretation, from one language to another. The action of making visible has also become a proof of an 'already activated' operativity or effectiveness; it is the a posteriori assertion of an experience. Indeed, operating on the discovery of a sonic theme or an aural contextuality that always has to be found in situ because it always depends on the place or the environment, Neuhaus cannot design - and therefore cannot draw - a priori. The drawings are a non-verbal materialization of an aural installation which has already taken place, or which in other rare cases has been thoroughly explored but not realized.

But the drawings are of different natures. The rougher one, almost sketches or notes, records developments in technique without actually defining the piece. The most detailed and constructed drawings, however, are those constructed a posteriori, after the work has been put into place. Instead of being turned toward the technical and operative dimension, the interpretative effort is here directed to the communicative dimension. It operates through a complex semanticization of signs, which are distinguished by the colors, the tracing in lead pencil, the trajectories and undulations of the lines, setting up a visual exchange between image, sound and architecture. Drawings emphasize the two primary components of Neuhaus' approach: architecture and the experience of

sound. The first is conveyed through the medium of a traditional technical drawing, an architectural study, and serves to introduce the context in a cold and impersonal manner. The second, on the contrary, is often 'narrated', translated into words, written in Neuhaus' own hand. Halfway between the two is the sound or the sonic topography. This constitutes the essence of the work, but translated into drawing; it is made manifest with color, from black pencil to yellow, blue and red pastels, the primary colors. In the drawing Times Square, the sonic construction, forming a block, is defined by the solar sign of yellow, while the reverberation, which touches the urban structure, becomes red. In this sense, color functions as an architectonic code, serving to construct the unreal city (the one in color) in its distinction from the real city (sketched in black).

Following their lines and perceiving their masses of color, one is pulled into a vortex of events forming a sonic constellation, indispensable for understanding the history of an interweaving of contemporary music and the plastic arts [4].

Why scores?

We not only experience things, we think about them, we talk about them, and the discussion, the intellectual dimension of something, the articulate dimension of something doesn't necessarily preclude the experiential dimension. The drawings are never shown inside the work; they present another dimension of the idea. They are statements in another medium. Some of them are summaries of structure; others trace or outline how the works are made. They connect people with the process.

# 9. PSYCHOLOGY OF PERCEPTION

Just as painters intuitively know more about visual perception than science is able to explain, so Neuhaus knew more about aural perception than psychology of perception. When he made a sound work he followed only his ear until he knew he arrived at the work.

Once a work is finished, he would not think about changing its sound any more than a painter would think of going back to a museum and changing a color in one of his paintings [1].

Despite the use of advanced technology, Neuhaus' work is not in the least conceptual. Neither the computer programs nor the sound sources' technical characteristics can be determined theoretically in advance. Although it is possible to put forward a few suppositions as far as the space is concerned, their accuracy and significance nevertheless have to be explored, which becomes a way of building the sound image piece by piece. To explore a space, Neuhaus uses sound that is standardized and precisely orientated: certain pitches from the audible spectrum are arranged into a sequence that is repeated at varying speeds, and a horn-type loudspeaker allows the sound to be directed precisely. As it is easy to manoeuvre, different positions and directions can be tried out and the reflecting qualities of the space's walls tested at will. The only instrument of measurement used here though is the human ear. These 'measurements' result in speakers being specially designed for the space and a programme being defined for each computer which is stored in a EPROM (Erasable Programmable Read

Only Memory), each of which constitutes a layer of the final sound of the work. These are the technical conditions of the work, which remain invisible. The person visiting the exhibition sees nothing but empty space; all he can count on are his ears [10].

One of the fundamental things Neuhaus did working on site is to learn about the range of its acoustic environment - the changes in it at different times. He then built a sound that works over that range, just as, say, a sculptor of an outdoor work might allow for a range of light conditions, for example.

The main goal is to design an electronic system whose sounds are so consistent with the environment that they seem indigenous to their location.

## 10. SOUND ART: FURTHER DEVELOPMENTS

Most of the things we now see classified as sound art are existing practices which already have names and are being lumped together under the term Sound Art to create the impression they are something new.

From the early 1980s on there have been an increasing number of exhibitions at visual arts institutions that have focused on sound. By 1995 they had become almost an art fad. These exhibitions often include a subset (sometimes even all) of the following: music, kinetic sculpture, instruments activated by the wind or played by the public, conceptual art, sound effects, recorded readings of prose or poetry, visual artworks which also make sound, paintings of musical instruments, musical automatons, film, video, technological demonstrations, acoustic reenactments, interactive computer programs which produce sound, etc. In short, 'Sound Art' seems to be a category which can include anything which has or makes sound and even, in some cases, things which don't.

Sometimes these 'Sound Art' exhibitions do not make the mistake of including absolutely everything under the sun, but then most often what is selected is simply music or a diverse collection of musics with a new name. This is cowardly.

When faced with musical conservatism at the beginning of the last century, the composer Edgard Varese responded by proposing to broaden the definition of music to include all organized sound. John Cage went further and included silence. Now even in the aftermath of the timid 'forever Mozart decades' in music, our response surely cannot be to put our heads in the sand and call what is essentially new music something else – 'Sound Art' [8].

From a conversation Neuhaus had with Ulrich Loock [1]:

It's as if perfectly capable curators in the visual arts suddenly lose their equilibrium at the mention of the word sound. These same people who would all ridicule a new art form called, say, 'Steel Art' which was composed of steel sculpture combined with steel guitar music along with anything else with steel in it, somehow have no trouble at all swallowing 'Sound Art'.

In art, the medium is not often the message.

If there is a valid reason for classifying and naming things in culture, certainly it is for the refinement of distinctions. Aesthetic experience lies in the area of fine distinctions, not the destruction of distinctions for promotion of activities with their least common denominator, in this case sound. Much of what has been called 'Sound Art' has not much to do with either sound or art.

With our now unbounded means to shape sound, there are, of course, an infinite number of possibilities to cultivate the vast potential of this medium in ways which do go beyond the limits of music and, in fact, to develop new art forms. When this becomes a reality, though, we will have to invent new words for them. 'Sound Art' has been consumed.

#### 11. REFERENCES

- [1] Loock, U. "A Conversation with Max Neuhaus", *Public Art Review Spring/Summer 00*, Saint Paul MN, 2000.
- [2] Neuhaus, M. *Elusive Sources and Like Spaces*, Giorgio Persano, Turin, 1990.
- [3] Neuhaus, M. Sound Works I-III, Cantz, Ostfildern, 1994.
- [4] Tazzi, P. Max Neuhaus La Collezione, Charta, Milan, 1997.
- [5] Neuhaus, M. Ears, Onestar, Paris, 2001.
- [6] Von Drahten, D. Max Neuhaus. Invisible Sculpture Molded Sound, Miscellaneus, Parkett, 1994.
- [7] Neuhaus, M. Sound Installation, Basel: Kunsthalle, Basel, 1983.
- [8] Kostelanetz, R. A dictionary of the avantgardes, Schirmer Books, New York, 2000.
- [9] Danto, A. "Max Neuhaus: Sound Works", *Nation* 252, no. 8 March 4, 1991.
- [10] Kaiser, F. "Creating a New Place in Space...", in *Max Neuhaus: Sound Line*, Centre National d'Art Contemporain, Grenoble, 1988
- [11] La Barbara, J. "Max Neuhaus: New Sounds in Natural Settings" *Musical America*, Hightstown NJ, October 1977.