



Soundscape Brasilia in Context By Hildegard Westerkamp

**A lecture concluding *Soundscape Brasilia*,
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Introduction

This workshop's emphasis was high-tech and production oriented. The aim was to produce a number of compositions about the Brasilia Soundscape, composed by a group of people from Brasilia. It was an ambitious project and would not have been possible to realize without Michael Fahres and Piet Hein van de Poel from Netherlands Broadcasting Corporation who were the co-producers of the project and brought the necessary technology and skills. Without them we would not have been able to produce seven soundscape compositions in three weeks, present them in a concert at the end and get them ready for CD production!

I very much enjoyed this process and right from the start in November when I first came to Brasilia to introduce participants to soundscape ideas, aesthetics and field recording techniques I was impressed with the quality of their work. The Brazilian workshop participants made all the environmental field recordings between November and April, organized their materials and with more or less consultation from us, planned their own pieces. None of them had ever composed with environmental sounds and some had never composed at all. The recorded sounds were then selected and entered into the computer for Piet Hein to clean up, edit and generally get ready for the computers' mixing and composing programs. Depending on the individual needs, participants would either work with P.H. or with Michael and myself on the final composition. We provided an average of three days for this process. At every stage, discussions about the content of the work and its structures were part of the ongoing process. I understood my own role to be that of co-ordinator/listener, making sure that participants were properly prepared for working with the unfamiliar technology, understood the process and that we all understood what they wanted to express through their pieces about Brasilia.

I speak about Brasilia as a foreigner. I was there altogether for only five weeks. I don't speak Portuguese and I am still quite unfamiliar with the Brazilian culture. I am not, however, a foreigner to listening, nor to soundscape and acoustic ecology issues. I will first discuss the Brasilia soundscape as I have experienced it within the larger context of soundscape thinking, acoustic ecology, and in relation to sonic environments of other places. Then I will tell you about the actual project *Soundscape Brasilia* and the resulting compositions.

Acoustic Ecology and Care for the Ear

The World Forum for Acoustic Ecology speaks of acoustic ecology as "the study of the relationship between living organisms and their sonic environment or soundscape." It sees as its task to "draw attention to unhealthy imbalances in this relationship, to improve the acoustic ecology of a place wherever possible, and to preserve acoustically balanced soundscapes." The underlying tone of these

statements is one of care for the sonic environment, listening with care, because "care of the world", to quote Thomas Moore, "is a tending to the soul that resides in nature as well as in human beings." He goes even further and calls it "soul ecology, a responsibility to the things of the world based on appreciation and relatedness rather than abstract principle. Our felt relationship to things wouldn't allow us to pollute...we can only treat badly those things whose souls we disregard." (Moore, p. 270)

How then do we create a "felt relationship" to the soundscape? It is really quite simple: listening with attention to the environment and not allowing it to abuse our ears. This, of course has certain consequences and will pose challenges for change to the new listener. For listening to the soundscape requires time, just as any truly felt relationship takes time, along with a willingness to be affected and changed by what one perceives. Wanting to care for the acoustic environment in the deepest sense, creates the desire to listen to it and vice versa, just as wanting to care for our children creates desire to listen to them.

There are other challenges that emerge when we practice listening with full attention. We may encounter blocks in our desire to listen that have their origin in early encounters with authoritarian situations, where listening meant to listen to others and where it was out of the question to listen to one's own desire. And these in turn may have created a deep inner need to be heard first before we are able to listen to others and the environment. Listening in this way undoubtedly poses a larger challenge than expected, as it means to disengage from this viscous circle of not being heard and not listening. It requires a willingness to learn a whole new way of relatedness to oneself, the sonic environment and its inhabitants, people and languages included.

Any noisy environment is another challenge to such listening. It often seems much easier to ignore noise such as traffic and pretend it is not happening. It is too all-pervasive to bother changing it. But in that process of course all felt relationship, all care for a place evaporates and a numbing of the senses occurs if not outright abuse of our ears and bodies.

Given these obstacles that I just mentioned and the many more that exist, how can we possibly feel encouraged to listen deeply and freely? Let's remember that our ears are our oldest sense, which is fully operational four months before birth. In their original, physically and psychologically undamaged state they are meant to function as energizers. Just as the body muscles or the vocal muscles need to be exercised to give us energy, so does the ear need to be used actively. But in that use it needs to be cared for. Thomas Moore writes: "if we are to attempt to develop a sound practice of ecology, we need to tend our own inner pollutions at the same time". (p. 273) Translated to the ear this means that we need to become aware of the sonic abuses that we may have suffered and are suffering presently and then practice "ear- cleaning", as Murray Schafer calls it.

Ear cleaning means exercising the ears. They are with us 24 hours a day. They do not sleep and have no earlids. Exercising them means two things: opening them to all sounds even if it is difficult at first and protecting them by finding and creating quiet places and times in daily life. It means finding strategies for retaining healthy ears. This is the first step towards caring for the ears and thus the sonic environment.

Brasilia's Soundscape

The idea of transferring the country's capital away from the coast has existed since the second half of the eighteenth century, as



Lucio Costa's first sketches of Brasilia



a way to populate, develop and secure Brazil's vast interior (James Holston, p. 17). In the mid-fifties during the presidential campaign of Juscelino Kubitschek it was finally proposed as a concrete project and was realized shortly after, in the 60s, Brasilia is a very young city. The part that looks like a bird on the map or rather like an airplane, is the so-called Plano Piloto, pilot plan. The masterplan for Plano Piloto was designed by Lucio Costa. Oscar Niemeyer was the architect who designed most buildings and Burle Marx was the landscape architect. Plano Piloto has been declared a heritage site by UNESCO and any changes to it have to go through a rigorous review process. I will limit my discussion to this part of the city with the consciousness that Brasilia stretches beyond these boundaries and that the satellite cities that

have sprouted around its peripheries in the last 30 years, are a direct result of the master plan. Generally speaking one can say that anyone or anything that does not fit into the masterplan concept is accommodated in these cities.



satellite city

The body of the airplane is made up of the Monumental Axis along which we find from east to west most government institutions, the cathedral, the hospital, commercial, hotel and bank sectors, the TV tower, the Kubitschek mausoleum, the military sector and the overland bus and train station. The wings of the airplane, called Asa Sul and Asa Norte, are made up of the Residential



monumental axis

Highway Axis which moves from North to South. This is where most people live in three to six story apartment buildings. Where the two axes meet is the rodoviaria, the central bus station. This is the centre of Plano Piloto, the "market square", where the work force from the satellite cities arrives and departs every day.

The crossing of two paths along the basic north-south and east-west directions, initially just a cross drawn in the earth, has grown into two huge traffic arteries with six lanes in all four directions. Compare the sound of the stick drawing this cross in the earth, and all the natural sounds accompanying this act, to the traffic sound that now occupies the centre axes through this city. This contrast is I believe the basic contrast today in the soundscape of Brasilia and surroundings.



On the one hand, it is very hard to get away from traffic noise within Plano Piloto. But on the other hand one does not have to drive very far to leave this behind and enter a very quiet, natural soundscape.

But visitors - and residents of Brasilia may not be fully aware of this - hear nothing but traffic from their hotel room. All hotels are located in the two hotel sectors and these are surrounded by large traffic arteries as well as smaller streets. As far as I could find out there is not one hotel room in the whole city that is free of this noise. Later at night when the traffic has subsided a little, another layer of sound emerges: the exhaust of every hotel's air conditioning system.

Traffic and the air-conditioning function like soundwalls, creating a barrier to hearing distance and quietness. Four weeks of this from my hotel room has undoubtedly taken its toll and influenced my perception of Brasilia. The overall traffic artery layout has been designed around the smooth flow of traffic, but very little seems to have been done to shield inhabitants from its noise. The obvious question then is, whether there was any thought of acoustic design in the grand design scheme of Plano Piloto.

As much as the Monumental Axis and the Residential Highway Axis may connect people between sectors or between home and work, acoustically speaking they form two enormous soundwalls that divide the city. The dimensions of the acoustic space that the traffic on these arteries occupy are much more extensive than their geographical dimensions. The traffic noise travels right across the expansive green spaces into hotel rooms, offices, churches, even schools, and many of the living areas. The eyes can see far but the ear cannot hear beyond the acoustic immediacy of the car motor. The Monumental Axis may offer many photo opportunities, but recordings made in the same place will offer little variation from the incessant traffic noise. Similarly inside the car, the driver is cut off from the outside soundscape. In fact, the windshield functions like a movie screen and the car motor and radio like the accompanying soundtrack. But because everything looks wide open one gets the illusion of space. Acoustically, however, one is closed in.

So, my point is clear. This city has exactly what other, not so consciously designed cities have - a lot of traffic noise. Meanwhile at the nearby lake one can find serene silence. It is obvious by now that Brasilia is a place of sharply contrasting soundscapes: traffic noise and natural sounds. There is very little in between. Human social contexts, like cafes or restaurants, appear in small isolated clusters, dotted all over the city, connectable only by car. That which defines a community acoustically is mostly lacking: the regular street, the small alleys, little squares, shady old trees, market places, neighbourhood cafes, those hidden corners that develop over time as a city becomes older. It is in those more intimate places where community develops, where culture first occurs, where people in their social interaction are protected from the larger noise of a city and can create

small islands of undisturbed communication, a type of inner voice or village voice of urban culture and social life.

Some Superquadras, the residential areas, seem to function a little bit like small communities with their own acoustic characteristics. In many of them traffic noise is at a healthy distance and the foreground sound of people's voices, birds, crickets, cicadas are pleasant and varied. I was told, although I have not seen a written reference to this, that the height of the apartment buildings (six floors) was determined partially for acoustic reasons: communication between parent and children is possible as far as the sixth floor but not further. So, ideally, if the parent is not listening to radio or TV, or running the vacuum cleaner, the child can be heard calling from the outside up to the sixth floor and vice versa.



Superquadras, however, are vulnerable to outside sonic invasions. Schools attract car traffic and according to one resident a lot of car honking, when parents come to pick up their children at noon and at the end of a school day. Recent noise legislation tries to protect residents from some sonic intrusions, by giving strict guidelines to bars, restaurants, night clubs etc. about interior acoustic insulation and exterior noise levels. Residential areas are not to exceed 45 dB after 10 p.m. I have noticed that some of these restaurants are very close to apartment buildings and was told that some establishments have been closed down as a result of noise complaints. There are, however, superquadras, that are built close to roads where no noise legislation can protect from traffic noise, unless the roads are closed to traffic.

Another type of sound that acoustically defines a community is largely missing in Brasilia: every community tends to have its own signals and soundmarks that give voice to a community's belief systems, activities and activity patterns and that give inhabitants, often unconsciously, a sense of place. Visually the urban landscape of Brasilia is full of architectural landmarks, giving monumental shape to the masterplan, but the soundscape is not defined by any significant soundmarks. In fact, the city does not signal anything but car alarms to the newcomer and therefore does not make our ears curious about its community life. I am told that the cathedral and some smaller churches have bells, but these are not prominent in the soundscape nor do they seem to be in people's consciousness.

So, if Brasilia is neither a city of prominent signals nor of small intimate community places, which acoustic qualities then give this city its character and its inhabitants a sense of place? What is its acoustic identity? The sounds that have kept my ears curious and exercised in Brasilia have been the cricket sounds which cut right through the density of traffic noise even in the hotel sector. There seems to be an endless variety of rhythms and resonances in these sounds.

Perhaps it is precisely the contrast between the anonymous international city sound of traffic and the cricket and cicada sounds specific to this place that characterizes acoustically what Brasilia still is: a pioneer venture, a master plan, modernist urban architecture with its claim to internationalism, cut into the Brazilian cerrado (bushland). It has in a sense "emigrated" into foreign, undeveloped territory, to start a new life, to transform social order and to negate and overcome underdevelopment in the rest of the country. The buildings are all there to attest to this ideal. But the soundscape reveals that the human psyche has not emigrated at the same speed. The international character of the city is only audible in the sameness of traffic noise, the worst aspect of internationalism.



I am told again and again that people who live in Brasilia really like the city. Apparently, in comparison to the conditions in other parts of the country, the conveniences and practical advantages outweigh the feelings of cultural estrangements and loss of community life. There is a certain freedom in a place of cultural anonymity. It reminds me of my own emigration from Germany to Canada: to be freed from those traditions that are restrictive means to have more freedom to move, both physically and psychically. One is free to invent a new life and to hear inner voices not tied to the voices of tradition. There is a liberation in that. But deep down the longing for those small nooks and crannies, those intimate places, those village and city squares with their fountains and old oaktrees, those bells that tell the time and make music, that longing stays. The memory of these places with their acoustic expressions define inner culture, emotion and imagination, they define

one's sense of community. They are the base from which one hears Brasilia.

Old cities have the advantage of street and building structures, belief systems, traditions already in place, with their characteristic sounds or soundscapes. Noise has less of a chance to invade. There simply is no room for motorized vehicles in many of the narrow alleyways and streets. And if they do enter, like they did in many European city centres, the noise and pollution have become so unbearable that common sense has banned all traffic from many of these centres. As well, certain sounds or soundscapes that are sacred or significant in other ways, are not allowed to be disturbed or eliminated.

But if we plan a brand new city and drive into a natural environment with our noisy motors and all that that entails and do not spend the time to listen to this new place, then traffic noise and construction is there first before our ears have had time to adjust to nature's quiet and to listen to all that it entails. Silence then is not given a chance - as Ursula Franklin calls it - "as an enabling condition, that opens up the possibility of unprogrammed, unplanned and unprogramable happenings." (The Soundscape Newsletter, #7, p. 6). It is in those creative silences that that which defines a place and a culture is given a chance to be born.

More and more I am understanding the project *Soundscape Brasilia* as creating such a space for listening, for finding the silences and the sonic character of this city. I feel that the workshop participants have understood this right away and searched for that which speaks of Brasilia in an honest voice and they have found those sounds and soundscapes that mean Brasilia to them. It is a kind of pioneer work, as one has to listen through the noise of new world mythology into a vast world of possibilities where culture has barely presented itself or if it was there in the form of tribal cultures, where it has been masked just as much as natural soundscapes have. In this case the microphones have lent a new ear to Brasilia.

Soundscape Brasilia: A Sonic Art Project

The last four weeks of the project were filled with the production of seven soundscape compositions, all concerned with Brasilia as it reveals itself through sound. Each of the seven pieces speaks with its own tone about the city. But listening to all of them together creates a sonic mosaic which gives voice to the city and its surroundings from various angles.

The microphone alters listening. The mere comparison between how our ears listen and how the microphone picks up sounds in the environment, brings alerted awareness to the soundscape. Not only the recordist's listening is intensified, often also that of people witnessing the microphone's presence. It creates an occasion and new significance of a place. Sometimes the microphone can also mean new access to the environment. It frequently legitimizes one's presence in certain places and even empowers one to enter places that one would normally not be allowed to enter. It also often heightens the recordist's own curiosity and encourages to venture into unknown territory. Of course, it can also block access when it is seen as a security threat or an invasion of privacy.

With the technology that Michael Fahres and P.H. van de Poel brought with them from the Netherlands a multitude of sonic possibilities opened itself up to the composers. The sound recordings could now be organized, juxtaposed, mixed and altered in all sorts of ways. With these possibilities a whole new Brasilia can be created on tape. We can side step reality, point out reality, we can create a caricature, make it poetic, sharper, softer, harsher, we can say what we want to say about the city, discover our specific perspective, or approach.

By making certain choices of microphone placement, selection of sounds/soundscapes, choices of juxtapositions and combinations of sounds, the composers present a very specific perspective of the city. These choices are always influenced by the cultural, social and political background and experiences of the recordist/composer, by age and gender, musical taste, past experiences with various soundscapes, as well as the present life situation.

It is astonishing how balanced *Soundscape Brasilia* in its entire length of seven pieces turned out to be. Even though the seven pieces are completely different from each other, certain symmetries and similarities emerged. For example, three pieces were created by groups of two or three people, and four pieces by individuals. One group and one individual took a montage approach to the composition. Another group and another individual created pieces that I would characterize as soundscape realism, pieces that present a story, a journey through a narrative progression. A third group and individual created pieces that are grounded in the style of contemporary classical

composition. Their differences each time originate in the choice of materials and their compositional approach. The seventh piece walks the boundaries between dream and waking, reality and imagination and helps us descend into the unconscious of aural perception.

Not surprisingly, those sounds that traditionally define a community acoustically, such as soundmarks and signals on the one hand and small social environments with human voices on the other, are largely missing in the compositions. Even though some of these sounds do exist in Brasilia, they obviously carry little significance in people's lives. Interestingly enough, traffic, the most pervading sound of all, hardly appears in the compositions. And if it does, then only in its more interesting manifestations, such as a single car passing, or a car starting. Only once is it used in its regular urban function as a soundwall.

All composers worked with contrast: quiet - loud; natural - urban/industrial; home - work; small - monumental; voices of children - voices of media; streetvoices - political voices; sounds as instruments - instruments as sounds. Participants invariably were drawn to quiet, natural environments, to musically, sonically interesting sounds, or to spaces with unusual acoustic properties. If industrial, mechanical sounds were recorded, then most likely those sounds were used whose rhythms and sound colours were interesting. Always sounds or soundscapes were chosen that in some way or another catch the ear's attention. But only one composition did not include an industrial or motorized sound. The pieces do indeed largely reflect what Brasilia is: a place of contrasts between nature and city, home and work, between wide open spaces and monumental structures, a city where human social interaction only happens in certain sectors or clusters of sociability.

[Details about the compositions and access to sound excerpts](#)

References:

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