

Can sound shape Public Space?

### **Pump Up The Volume**

Cruising through OMA's Lille project we made an astonishing discovery. Descending the so called Espace Piranesien, "an absence of building that reveals the highway, railway, three levels of parking, and the metro", we were confronted with music. Mood Music. This "overtly metropolitan moment" that "as such reveals the surrounding forces" was dominated by the soothing vibrations of Muzak. The true character of this connective emptiness was obscured, the impact neutralized; Rem's Void filled with Jacques Brel.

After reading the text "Pump up the volume" starting from 0:00sec- ending 0:15sec

Jacques Brel

<http://www.youtube.com/watch?v=RKMqCqjixyo>

This artificial mismatch was thrilling. And it raised questions. How could it be that sound had such impact? How could it overrule vision? It became clear that the office needed a DJ, or composer. Adrian Sherwood maybe?

### **Music for Airports**

In 1978 Brian Eno released the album Music for Airports. The music was designed to be continuously looped as a sound installation, with the intent to defuse the tense, anxious atmosphere of an airport terminal. It was installed at the Marine Air Terminal of New York's LaGuardia Airport.

You can put the music behind the reading of the text "Music for airports"

Brian Eno

<http://www.youtube.com/watch?v=J9wQFcj5PhU> (please look in music files we send you: YouSendIt)

### **Elevator Music**

Elevator music, also known as lift music, piped music or Muzak, refers to the gentle instrumental arrangements of popular music designed for playing in shopping malls, grocery stores, department stores, public toilets, telephone systems (while the caller is on hold), cruise ships, airports, on television shows, doctors' and dentists' offices and, of course, elevators.

You can put the music behind the reading of the text "Elevator music" starting from 0:16sec -... and continue a little after the reading

The Carpenter Medley

<http://www.youtube.com/watch?v=9clzZQyoRd0>

### **Music as a repellent**

During the last ten years another use of Elevator Music has emerged, not with the aim of relaxation and pleasure, but to make loitering less attractive for those people who dislike the music (allegedly drug addicts, prostitutes etc.). For this purpose serious classical music (e.g. opera, marches or sonatas) is

used and played louder than usual. One of the first places it was tested was reportedly in Amsterdam. Since November 2002, loud classical music is also played at the Central Station of Copenhagen in some elevators and at the entrance towards the city's red light district where drug trade used to be a problem, sometimes so much that the mob blocked the normal flow of people in and out from the station. The music is played from hidden loudspeakers and it is not visible where one could 'hide' best for the music. As a consequence, the drug dealers have left the entrance, but can still be seen in the street outside. An article from May 2004 in a Danish journal of drug abuse reported that many of the targeted drug addicts felt annoyed and sad because of the music, because it is a constant symbol that they are unwanted. This applied even to those who actually liked classical music!

You can put the music behind the reading of the text “ Music as a repellent”  
Bach concerto no.1 (please look in music files we send you)

### **Mosquito**

Of similar use, but only audible to the very target group itself, is the 'teenage repellent' electronic mosquito sound. The Mosquito or Mosquito alarm (marketed as the Beethoven in France and the Swiss-Mosquito in Switzerland), is an award-winning electronic device which emits an ultrasonic sound, similar to the buzz of a mosquito (approximately 17.4 kHz at 85dB). The device is typically heard by people under 25 because the ability to hear high frequencies deteriorates in humans with age (a phenomenon known as presbycusis). The device is marketed as a safety and security tool for preventing anti-social behavior such as gang loitering which has been publicly associated with graffiti, vandalism, drug usage, drug distribution, and violence. The Mosquito is very popular in the UK, with some 3500 in use, mostly by shopkeepers and police authorities.

If you hear this you're probably under 50 [sound after this sentence 12 kHz](#)

If you hear this you're probably under 45 [sound after this sentence 14 kHz](#)

If you hear this you're probably under 40 [sound after this sentence 15 kHz](#)

If you hear this you're probably under 24 [sound after this sentence 17 kHz](#)

[Please play the different sounds after the sentences](#)

<http://www.teenbuzz.org/>

### **Ringtone**

Some adolescents, however, have found the once annoying sound can be used as a tool, and turned it into a ringtone to prevent disciplinary actions that would normally be imposed if a mobile phone user was caught using their phones during school hours, by creating a mobile phone ringtone that is inaudible to most adults. This ringtone became informally known among schoolchildren as "Teen Buzz", and has since been sold commercially.

[After reading the text “Ringtone” starting from 0:18sec - ending 0:42sec](#)

<http://www.youtube.com/watch?v=t4uDhaC8PMs>

### **Space Music**

Space Music is an umbrella term used to describe music that evokes a feeling of contemplative spaciousness. Space music ranges from simple to complex sonic textures, often lacking conventional melodic, rhythmic, or vocal components, typically evoking a "continuum of spatial imagery and emotion", and psycho-acoustic spatial perceptions, particularly, sensations of flying, floating, cruising, gliding, or hovering.

According to Kees Went of the Institute for Adaptive Music and Sound Physical space does not coincide with acoustic space. Generally speaking most people's acoustic space is much larger than their physical space.

Begins after reading the text "Space music", as background music behind "Urban music" "Chamber music" and "Furniture music". Backgroundsound starting from 4:03sec – 4:45sec, loop if necessary

<http://nl.youtube.com/watch?v=5ZYFaEZV-aQ>

### **Urban Music**

Rap, Hip-hop and R&B are referred to as Urban Music.

### **Chamber Music**

Chamber Music is a form of classical music, written for a small group of instruments which traditionally could be accommodated in a palace chamber. The word "chamber" signifies that the music can be performed in a small room, often in a private salon with an intimate atmosphere.

### **Furniture Music**

*Furniture Music or in French musique d'ameublement, is background music originally played by live performers. The term was coined by Erik Satie in 1917.*

### **Boom Bench**

Droog Design and curator Scott Burnham have asked NL Architects to bring in ideas for interactive urban interventions for this year's Experimenta, the design biennale organized in Lisbon and Amsterdam. One of NL's contributions is the Boom Bench. The Boom Bench is 'regular' street furniture with an added value. Since the Walkman and the Boom Box music became mobile. People carry music and play it over headphones, or, more popular every day, over small speakers in their Cell phones or iPods. Especially kids like to go public, they like to share. The music extends their personality onto the streets. But so far the sound quality of these devices is poor. In order to boost the capacity the Boom Bench features eight 60-watt co-axial speakers and two subwoofers that can be accessed through Bluetooth. The Boom Bench in a way is a super-sized Docking Station. Connect your player to the

amplifier and take control. Now you can play your music with 95 dB high quality sound. A Bass Shaker in the seat transforms the deep sounds into vibrations that enhance the physical sensation of your tunes.

### Starting gently the music (starting from the beginning of the song)

The first Boom Bench will be placed on the North bank of the River IJ, right in the physical center of Amsterdam. The Boom Bench will go online on September 18 for a temporary period of 6 weeks in the framework of Droog Event 2: Urban Play.

After end of reading the text "Boom bench", music gets louder, 30sec long

<http://www.youtube.com/watch?v=eTI2xX5tkQ&feature=related>

### Requiem

According to a report by the research and consultancy organization CE Delft for the EU annually 50.000 people die of heart failure caused by traffic noise.

According to the British Transport Research Laboratory (TRL) drivers using hands-free phones have slower reaction times than those under the influence of alcohol. They are four times more likely to have an accident while using any mobile phone during driving, whether used hands-free or not.

After reading the text "Requiem"

<http://www.tradebit.com/filedetail.php/1818156-car-crash-sound-effect-5-wav>

### Wall of Sound?

In 2004 American soldiers in Iraq were equipped with a Long Range Acoustic Device (LRAD). LRAD works like a highly directional, high power megaphone, able to blast sounds in a narrow beam and with great clarity at a deafening 150 decibels; 50 times the human threshold of pain. LRAD can also create deafening noises which disable people within 300 meters by "firing" short bursts of intense acoustic energy. LRAD can produce the effect of "being hit by a wall of air that is painful on the ears, sometimes causing nosebleeds and leaving you shaking inside".

We found something here!

It lasts only 5 seconds: 0.03 till 0.08 sec (no human voices!)

<http://www.youtube.com/watch?v=jqdbCGzmCfg&NR=1>

### Out of this world

On May 10, 2003, Algerian aid worker Lail Saidi was arrested in Tanzania taken to the border of Malawi; blindfolded, restrained by ear muffs and an anal plug, shackled, and flown to "a 'dark prison' filled with deafening Western music." One of his captors shouted at him through an interpreter, "You are in a place that is out of the world. No one knows where you are, no one is going to defend you..."

After reading the text "Out of this World" starting from 1:20sec - ending 1:50sec

Coming to America, Neil Diamond

<http://www.youtube.com/watch?v=u2Ceq8wmxlG&feature=related>

### **Sound Design:**

Sound Design can be defined as: "The manipulation of audio elements to achieve a desired effect".

At BMW an army of 9000 engineers develop the new cars. Hundred twenty of them are Sound Specialists. "We design sounds that sound authentic but in fact are artificial". In the design process at BMW, motor sounds now can be simulated with computers and adjusted to get the desired effect.

According to Elif Ozcan, an industrial designer at TU Delft, the main concern of designers was to reduce sound or noise, for instance in vacuum cleaners. But they can be too effective: "if the machine becomes too quiet, people think it doesn't work". Philips Whirlpool laundry machines were equipped with anti-noise. Many were returned with broken door handles. They were so silent that people thought they were switched off.

So we can make machines sound perfect. But what about our buildings?

### **Brick House**

Phillip Johnson's bedroom in the Guest House (or Brick House) at New Canaan features a remarkable gadget. The house is the inverse of the Glass House ("Because you can't have sex in that house", pointing at the Glass House). If I remember correctly the bed looks like a spacey version of a four-poster bed. It has a cupola hovering above it. The inverted bowl collects sounds from the bed and amplifies them: when positioned in the middle of the bed every sigh turns into orgasmic roars!

(Luca, Don't look at your screen!) After reading the text " Brick house"

Gay Porn sounds

[http://galleries.xtrainches.com/080717\\_xi\\_huessein\\_sarib\\_joey/arabesque\\_2\\_320x240\\_15s\\_03.mpg](http://galleries.xtrainches.com/080717_xi_huessein_sarib_joey/arabesque_2_320x240_15s_03.mpg)

### **Nightingale Floors**

Nightingale floors or uguisubari were floors designed to make a chirping sound when walked upon. These floors were used in the hallways of some temples and palaces, the most famous example being Nijo Castle, in Kyoto. Dry boards naturally creak under pressure, but these floors were designed so that the flooring nails rubbed against a jacket or clamp, causing chirping noises. The squeaking floors were used as a security device, assuring that none could sneak through the corridors undetected.

Starting gentle while the reading of the text “Nightingale floors”

<http://www.youtube.com/watch?v=jJThECzA1bc>

### **Urban Jungle**

While Biodiversity is under pressure, more and more artificial species emerge. Car alarms, ringtones, trucks backing up, traffic lights, suitcases with wheels, etc seem to fill up the void.

According to Kees Went, in the natural soundscape there is a vocal "give and take" between species. Animals tend to occupy small bands of frequencies to give way to other animals to fit in. Also time is divided in parts of the day and the year where every breed has its turn. Some songbirds exclusively sing in the morning, others just sing in the evening. We can still discern a broad perspective in present rural soundscapes where the acoustic horizon may extend for many miles. In the city there is no division into small frequency bands. All sounds are placed on top of each other. The only defense against noise for citizens is to put another layer on the sound pile. Because of this the urban soundscape becomes louder and louder. In a modern city there is an increase in sound level of 1 decibel each year. This means that in ten years the perceived loudness is doubled (10 decibels)!

The importance of sound in the appreciation of the environment is underestimated. In urban planning sound should not merely be considered as a pollution problem but positively addressed as one of the parameters in environmental design.

You can put the music behind the reading of the text “Urban jungle”

Please mix the bird sounds after each other

<http://www.freesound.org/samplesViewSingle.php?id=14909>

<http://www.youtube.com/watch?v=RA61Otj5bk&feature=related>

[http://www.youtube.com/watch?v=qOp8\\_tRAQK4&feature=related](http://www.youtube.com/watch?v=qOp8_tRAQK4&feature=related)

### **Church Bells**

*“Surveys of the urban sound environment show an unambiguous preference of the interviewees for the sound of Water and of Birds. In third place come Church Bells. Church bells extend the horizon and have a symbolic value connected to a sense of community”.*

For the city of Koog aan de Zaan, a 20 minutes drive from Amsterdam, NL Architects re-designed the space under the elevated highway A8. As part of the arts program, NL proposed an installation that would connect some of the main features of the area, the Church and the Highway. The idea was to count the passing cars and to send a signal to the church tower. Every batch of 1000 cars would activate the church bells, changing your perception of time and place.

After reading the text “Church bells”

Please mix the church bell sounds together! (chaotic), ca.15 seconds long

<http://www.youtube.com/watch?v=9ksXJpLZeJw&feature=related>

[http://www.youtube.com/watch?v=sAm9v\\_L8Uls](http://www.youtube.com/watch?v=sAm9v_L8Uls)  
[http://www.youtube.com/watch?v=c\\_UUwo54N04&feature=related](http://www.youtube.com/watch?v=c_UUwo54N04&feature=related)

### **Brown Note**

Political activists planning protest rallies at the upcoming Democratic Convention in Denver have their stomachs in knots over a rumor about a crowd control weapon - known as the "crap cannon" - that might be unleashed against them. Also called "Brown Note," it is believed to be an infrasound frequency that debilitates a person by making them defecate involuntarily.

The Brown Note, according to an urban legend, is an infrasound frequency that causes humans to lose control of their bowels due to resonance. The name is metonymy for a common color of human feces. Frequencies supposedly involved are between 5 and 9 Hz which is below 20 Hz, the lower frequency limit of human hearing. High power sound waves below 20 Hz are felt in the body, not heard by the ear as sound.

The story of the Brown Note, also known as the "Disco Dump," asserts the existence of a low frequency vibration which, when reproduced at sufficient volume, resonates with the depths of the human digestive tract to cause what medical personnel call "involuntary gastrointestinal motility." Put in less technical terms, the Brown Note reputedly precipitates a loss of sphincter control, giving rise to immediate defecation.

Public Space now can be turned into Public Toilet! Is it a hoax or does it really work? Please listen closely and see how it affects you!

After reading the text "Brown note", ca.40 seconds long

<http://www.youtube.com/watch?v=On2ZMejrQqY>