

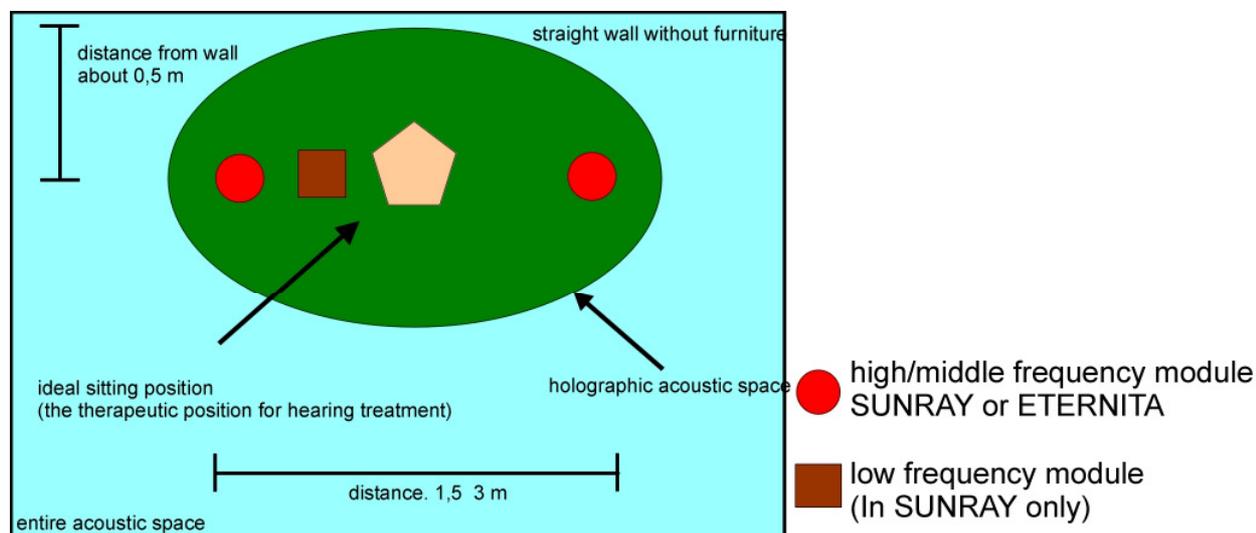
Therapeutic Use of NATURSCHALLWANDLER®

May 29, 2013

I. Effects of Natural Sound on the Human Organism

For many people, besides relaxed natural music listening NATURSCHALLWANDLER (abbr. NSW) bring about individually varying physical, emotional or sensory (perceived by sensory organs) reactions in the acoustic hologram created by NSW.

The purest experience can be made by arranging the system in the format of a therapeutic acoustic space where the listener's position is exactly between the NATURSCHALLWANDLERS.



Graphic: therapeutic acoustic space design

In many cases the following phenomena occur independent from the chosen music:

- altered sensation of cold or warm
- spontaneously altered hearing perception, also in the case of tinnitus
- sensations in specific organs or joints (e.g. head, ears, throat, thyroid, neck, shoulders, hands, back, chest, heart, solar plexus, stomach, abdomen, legs, knees, feet, bones)
- skin reactions (e.g. altered blood circulation, goose bumps)
- spontaneous emotions like laughing or crying, feelings like joy, sadness or being moved
- relaxation, inner letting go, tiredness, clear mind

Since 2005 these reactions naturally led us to research and development of certain therapeutic and health effecting procedures for specific disease patterns. This resulted in a functioning basic treatment (see chapter VII.), which is already successfully applied in testing and regenerating hearing disorder e.g. in cases of one sided or both sided hardness of hearing, also for users of hearing aids.

II. Specific Characteristics of Natural Sound

The special effect of NSW is based on the following physical characteristics and qualities, which are also given in the sound radiation in nature.

1.) The quality of sound movement in all directions

All frequencies of the sound produced by NSW move simultaneously from one point in all directions. Beginning at the campanoid (a fixed geometric double cone shaped in a certain way) the total spectrum of sounds spreads out into space spherically.

2.) The quality of sound evolvement with hardly any pressure

NATURSCHALLWANDLER® creates sound by its specific geometric shape and especially aligned frequency separating filters almost without acoustic pressure. The biggest amount of the normally existing pressure is neutralised by the double cone (campanoid), located between the middle and high frequency module. The sound frequencies can harmoniously move into the three dimensional space, permeating each other without mutual blocking. Thus the organism, experiencing sound pressure as unnatural and unhealthy, is not forced to protect itself. In an acoustic space without this pressure the organism opens up and reacts relaxed and harmoniously.

Treatments of visually handicapped or blind people with NSW impressed by showing the strong wish to avoid the sound pressure of conventional acoustic systems. It can be assumed that blind people have a particularly sensitive and refined sense of hearing. After careful acoustic sensing and a personal test of sound pressure blind people feel attracted to the acoustic hologram and place themselves in the middle of it quite close to the system.

3.) The three dimensional sound space

When two sources of sound spherically radiate sound waves into space they permeate each other and create a three dimensional acoustic space. In this acoustic space – the acoustic hologram - humans can perceive sound frequencies and their radiation not only right/ left, but also back/ front and below and above. He/ she can listen into the depth of space. This equals natural human hearing. Rooted in an evolution based structure of processing acoustic information it is recognised as part of a natural order.

4.) Applied physics of natural sound: permeation, resonance, reflection

Any sound radiation stimulates the materials around. Depending on density, mass and their own natural vibration sound frequencies always permeate, reflect and resonate with matter in their surrounding. The undirected, pressureless sound frequencies of NSW can e.g. permeate the human body. The listener feels like flooded with music (“like bathing in sound”).

At the same time because of the high vibrational capacity of the body cells themselves and of cell liquid, of body tissues, of skin and bones a strong resonance with the received sound field happens. In case the sound frequencies are able to move harmoniously the body also resonates harmoniously respectively the sound frequencies have a harmonizing effect. Thus potentially the body's own self-regulation is activated and stimulated.

Consequently it is also depending on the frequencies (of the chosen piece of music) to which degree cells are able to resonate harmoniously. This means that normally the organism resonates differently with a sonata of Mozart or Heavy Metal music, with a bird song or a chainsaw.

Summary: The physical combination of all mentioned aspects in a NATURSCHALLWANDLER R (sound movement in all directions, no sound pressure, acoustic hologram, permeation/ resonance) initiates self regulation in the whole organism including the cell level.

III. The Aural Sense and the Brain – Processing Sound Information

The ear converts sound waves transmitted through air (air conduction) into nerve impulses which then are processed by the brain as acoustic information. But the brain can also process frequencies of the bones, especially deep frequencies (bone conduction) as well as high frequencies of the skin (skin conduction). All sensory functions of sound intake together, in combination with the correct processing of this information in the brain – in the first place in the auditory cortex – is what we call the human hearing sense (=sound intake and processing).

A well functioning hearing sense gives us an overall and precise orientation in space through auditory perception. The perception of near and far from the own position in relation to static and moving other objects/ bodies in the overall closer and further environment has to be located by the hearing sense. Almost simultaneously this perception has to be calculated and located in the brain in order to define the own position in the three dimensional space as well as in the time dimension as precise as possible. Own movements or movements of others, distances, approaches, standstill and speed

must be taken in acoustically, conducted to the acoustic cortex in the brain through the central nervous system where they are analysed, evaluated, respectively calculated.

Every inner ear is connected to both halves of the brain. This is the precondition for the comparison and the calculation of acoustic signals in the brain.

What is remarkable here is that the sense of balance is also located in the ear.

IV. A Natural Acoustic Order

For the relation between good hearing, a stable and vital body feeling and clear and precise spatial orientation it is of great importance to be aware that these vital functions are based on mathematic calculations in the brain. When hearing is in disorder, or when confusing acoustic information is delivered to the brain, a correct and clear calculation of the acoustic process of the environment and a clear orientation are also disturbed. The result is stress for the whole organism.

Orientation in space happens through three dimensional axes of coordinates distinguishing between

- front – back horizontal axis
- above – below vertical axis
- right - left lateral axis

These spatial axes of coordinates are the orientation for the clear calculation of one's own position in relation to all other active existing sound sources and resonating materials.

A spatial localisation arises through one's own acoustic perception. When the localisation in the axes of coordinates is set properly and works stable, one can speak of a healthy sense of hearing.

Good hearing is characterised by clear spatial perception and orientation, definite localisation of sound sources, precise and clear hearing, a definite personal position (also in the meaning of inner sense of self) , a healthy body feeling, a good sense of balance – all these are precious qualities resulting from a vital, intact hearing and the correct calculation made in the brain.

V. Hearing Regeneration by Natural Sound

Since 2005 MUNDUS GmbH in cooperation with scientists, doctors, therapists and pedagogues explores the connections between natural sound, undirected sound movement and the effect on the human organism and the hearing capacity. In this period of time several thousand individuals were able to experience NATURSCHALLWANDLER® and contributed various impressions and perceptions for a deeper understanding of natural acoustic and further development of NSW. What

we call natural acoustic are the physical processes in arising and spreading of sounds as they happen without human influence or manipulation.

These insights led more and more to a non-invasive (medical or therapeutic treatment where no medical instrument enters the body) functioning basic treatment for humans for a systematic analysis of the current auditory skills and space perception as well as for an active regeneration of the three dimensional localisation of sound sources. This treatment can basically be applied to any one.

VI. Existing Experiences in Hearing Regeneration

In working with NATURSCHALLWANDLER@s various observations of the regeneration of hearing damages ask us to explore and take a new look at their development as well as their treatment possibilities.

Basically we find three kinds of hearing damages, always result of a traumatic experience with an effect on hearing.

1.) Accident or mechanical effect

- e.g. the ear is injured by external circumstances

2. Overload of the hearing sense by a too high sound level

- e.g. blast trauma from a shot, explosion trauma, noise trauma, also related to disharmonious frequencies like chainsaw, aircraft engine

3. Traumatic hearing experiences independent from the sound level

- e.g. a child experiences a fierce row of the parents, insults, hostility, shouting, humiliations

All mentioned traumatic hearing experiences can lead to physical damages or to incorrect processing of information in the brain (e.g. in the case of Tinnitus) or there is a combination of both effects. This is a protection mechanism of the brain as a control center varying in length to avoid further traumatic experiences. Longer lasting restrictions of the hearing sense often lead to the manifestation of wrong hearing habits, (e.g. turning one's head with the supposedly 'better' ear forward).

In a medical examination normally the mentioned hearing problems are only seen as caused by physical reasons. However we have often made the experience that for many individuals such forms of hearing restrictions can be regenerated with our basic treatment.

The following hearing problems can usually be eased with the basic treatment:

- one sided and both sided hearing disorder and deafness
- necessity of hearing aids
- so-called age-related hearing loss
- missing perception of certain frequencies
- Tinnitus
- high volume sensitivity

Repeated and regular listening to NATURSCHALLWANDLERs combined with following through the basic treatment helps the organism to get used to the right hearing- brain- coordination again and to train correct processing of acoustic information anew.

It must also be mentioned that pets like cats and dogs also resonate with the undirected and pressure reduced sound of NATURSCHALLWANDLER. Out of their own initiative they seek the acoustic hologram space and often lay down there. Even higher volumes don't discourage the animals at all.

VII. Realisation of the Basic Treatment

The basic treatment should only be implemented by a person trained in working with NATURSCHALLWANDLER. Training and instruction on the basic treatment for hearing regeneration is carried out by qualified personnel of the MUNDUS GmbH. After each basic treatment the process and its results are collected and documented in a questionnaire. The questionnaire can be requested from MUNDUS GmbH.

VIII. Creating a Network of Therapists

MUNDUS GmbH has set itself the objective to intensively investigate the outlined effects of NATURSCHALLWANDLER® on humans collected since 2005. The intention is to publicise them and bring them up for discussion.

All those involved in therapy and medical treatment in the area of prevention and health are cordially invited to participate in research, further documentation and publication.

Contact at MUNDUS GmbH: Anton Stucki