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I Idea of the Installation

The sound installation „Sensitive Threshold“ serves as a means of instruction and as a means of research at the same time. The main thought is to bring about different learning processes and to provide an opportunity for the pupils to stage many subjects in school.

The conception of the sound installation is especially led by the following pedagogical consideration: Social community is perceivable not only through visual and moving images of itself or such of the significant or extraneous other, but it is also a community of responsivity. Before a child learns to speak it is sonically addressed by others and it responds to this, at the beginning without words. In this process the integration into a community of other people takes place: The child becomes a social being. This is the core of our motivation and for our engagement for ourselves, for others and for our life-world.

In our daily world we find several correspondences to this:

Earphones worn by pedestrians walking in the street cause a weird intimacy by letting them hear and speak with a virtual person and e.g. an audio-guide used in a museum to make topics such as history, politics, culture etc. audible by means of spoken texts and sounds. Furthermore we cannot avoid hearing the advertising in a department store, the spoken information of a bus driver etc. Not at last we can move in a cyberspace respectively in virtual realities, causing effects by walking or putting our hands up, etc. Obviously we are acoustically addressed not only in private, protected rooms but also in public, in open, even in virtual spaces. Here our vulnerability stands in relation to our competencies.

Entering their school pupils and their teachers often meet a very harsh noise carpet. Beside this acoustic attack they are also in a second inevitably overwhelmed by memories, subjective thoughts, expectations, pleasant anticipations, apprehensions or other imaginations. Shortly: Certain sensory stimuli are connected to a broad spectrum of subjective associations. In this often intense liminal situation these sort through their thoughts and their feelings in the fragment of a second and they prepare for the multiple events they expect to undergo. They are taking over a role, “pupil” or “teacher”. The world outside the school fades, respectively is disappears under the cover - and maybe breaks its way through subversively. In respect to the mandate of the school to convey cultural values and contents this occlusion may be counterproductive.

In our lifeworld many different crossovers are connected with sounds, with an atmospheric “shower” and with subjective feelings, memories, with an emotional evaluation and with an individual cognitive reorganisation. A public swimming pool, a city, a cowshed, a theatre – all these places are characterised by sound carpets. At the same time the references to such cultural locations play an important role in school lessons.

The idea is that through audible recordings such as ambient noise carpets, music, verbal explanations etc. a broad knowledge about a culturally significant situation or concern can be

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mediated. In order to make this possible I developed the sound installation “Sensitive Threshold”.

II Functional description of the Installation

IIa Technical details of the “Sensitive Threshold”
A camera and six loudspeakers are built into the ceiling of a room. The camera is connected to a computer which runs an especially designed software. This software analyzes and extracts the movement data out of the streamed camera pictures. With the help of the software interface one can freely distribute up to six zones that are sensitive to the movements within the room. For every single zone the software contains parameters for zone position and size, fade-in and fade-out time and gain. So, every time a person walks through such a zone, a sound is triggered and will be played back by the loudspeaker that is related to that zone. Every zone can trigger up to eight different sounds. The “Sensitive Threshold” runs as an automated installation. It is now installed in the foyer of a secondary school in Berlin.

IIb The “Sensitive Threshold” used as a learning and teaching tool.

Several transdisciplinary teaching units have been developed based on the structure and property of this installation used as a learning and teaching tool. Some of these topics developed by the pupils are: “Sounds of Everyday Life”, “Dying and Death”, “Atmospheres of a Metropolis”, “Love”, “The Temperate Zones of Africa”, “The Sounds of Footsteps”, “Amber”, “Summer holidays”, “The Sports of Animals”, “The Middle Ages”, “The Colour Red”, “The History of the school”.

At first learners produce their own audio-guides by choosing a subject, finding a way to make it audible and collecting the sounds by using the Internet or an MP3-Player. The pupils are instructed how to record and how to collect sounds and how to charge them digitally, how to combine them etc. The transformation of learning contents into sounds and the justification bring about diverse learning processes. Moving their bodies and “touching” sounds in the foyer other kids can pick up the presented topic in emotional, imaginative, or cognitive ways. Their imaginations serve as a basis for further learning processes. For example in the frame of the interdisciplinary project “The History of the school” typical scenes and situations are imitated and recorded. During the schools summer celebration day with the same topic the installation has been set up, accompanied by several exhibitions, performances etc.

In order to evaluate the impact of the “Sensitive Threshold” scientifically the lessons, movements and other events have been recorded and filmed. The following small sequence of a conversation took place in a mother tongue lesson in the 7th grade. They speak about a sentence stemming from Wolfdietrich Schnurre (1958) “Als Vaters Bart noch rot war”: “[…] überall auf den Höfen bellten die geprügelten Teppiche los” / “Everywhere in the courtyards the beaten carpets barked”.

L: Genau im ersten Abschnitt ( ) bellten die Teppiche los
Precisely in the first clause ( ) the carpets start to bark
S¹: Teppiche Teppiche
Carpets carpets
L: Das ist ein Bild also Teppiche bellen eigentlich nicht
That is a metaphor carpets in fact do not bark
S²: Tiere bellen
Animals bark
S³: ( ) Man muss sich eines aussuchen wa ( ) da schreib ich einfach Ratten drauf ( )
( ) One has to choose one thing eh ( ) I simply note rats
L: Genau bellten die geprügelten Teppiche ( ) los was ist gemeint damit weißt du das was sind
denn geprügelte Teppiche
Exactly the clubbed carpets barked ( ) go on! What is meant by this do you know what is meant with clubbed carpets

S¹: Ausklopfen
To beat

L: Ah genau das ist einfach nur ein Bild für das Ausklopfen von Teppichen das beschreibt ja auch noch
Ah, precisely it is just a metaphor for the beating of carpets that also describes

S²: ( ) Ratten im Teppich
( ) Rats in the carpet

(Schüler schlagen auf eine Pappe, the pupils beat on a piece of construction paper)

S☐: Musst Teppich schwer klopfen hier ( ) das bellt
You have to beat the carpet heavily here this way ( ) that barks

The pupils are confronted with a poetic metaphor: a beaten and barking carpet. The student S¹ simply repeats the word “carpet”. Instead of him the teacher denotes the metaphorical sense of the sentence as a kind of riddle: “That is a metaphor, carpets in fact do not bark.” Another student returns to the simple level of meanings by explaining a mere, unless not completely right fact: “Animals bark”. With his in a way surrealist association “Rats” student S☐ joins in the gap between the real and the false statement and thus opens it to fantasy. The teacher goes back to the realistic semantic level by bringing up the beaten carpets again, calling them clubbed. A student corrects her. As the teacher now goes back to the metaphorical sense, some students utilize the situation of a still indefinite interpretation and start acting…

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Transformation…..