



Universität der Künste Berlin

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# Sound Studies

Akustische Kommunikation

## What are Sound Studies?

Introducing a new and yet old discipline

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### **We hear**

the gentle hum of a loud speaker. Monitors and lights with their high frequency buzz, a passing gush of air and breath. A higher echo when we raise our voices. Move our legs and arms. Sit in the audience and lean towards one another, exchange a few words or whoosh past as we make our way through the room. This room.

We settle ourselves into our seats and focus our attention. Wait for an announcement. Quiet down.

### **A question of sound**

This is a listening experience, here and now – right this second. Right here.

How do we describe this kind of experience? How do I give a clear and comprehensible impression of how I perceive our joint listening experience – and how can you do the same for your experience? We don't know how someone else hears, perceives, evaluates or experiences a given situation. One situation entails as many different listening experiences as there are listeners. Individuals.

We ask ourselves: Do we like this situation? Is this experience pleasant or helpful? Would we prefer to intervene, change the nature of what we hear and significantly alter our sound environment?

Perhaps a temporary intervention – like a short signal – or a more permanent alteration with lasting effect? Electromechanical playbacks, architectonic adjustments, decorative additions? Socially catalyzing actions? What would a concept for redesigning this room, this listening situation, entail?

And again the question: how can we meaningfully explain other individuals' acoustic concepts? What do we lack – technical, anthropological, design or artistic knowledge? And yet another question: A media recording of this event... how should it sound? Working with media sounds would require another approach altogether. A feature, a radio story, a clip – how do they differ from our actual listening situation in this space?

These questions originate from individual disciplines with their respective standards and requirements, and various types of professions are able to answer them. Technical and scientific, creative and artistic – a range of approaches and expertise focuses on different individual questions. A question of sound. How we react. How we change the situation. These are questions that have been posed with increasing frequency since tools for the technical recording, reproduction, measurement and manipulation of sound have become widely available.

From the time hierarchical decision processes, teams and commissions, briefings and guidelines, evaluations and milestones, have determined the world we live in. From the time we have hardly been able to move through an environment without being enveloped in sound design, confronted with the experience of being challenged or overwhelmed.

### **A new challenge in design**

Sounds are interventions in our personal life.

We are surprised and pleased by what penetrates through to our senses and thoughts. Listening sensibilities, reflective experience. Sonic situations satisfy our desires and disappoint us, alter our sense of well-being and make us listen more intently. Studying sound.

The impact of sound is technically defined as noise, musically defined as *Klangfarbe*, and musically described as acoustic space or – in the context of Cultural Anthropology or Cultural Studies – as sample. Since the early modern era the study of sound has ranged from meditations on the dispersion, effect and generation of sounds, to musings about literary descriptions and the terminology of hearing, and to experiments with electro-mechanical and electronic sound generators,

mufflers and amplifiers.

In audiovisual design musical sounds are used as functional applications. In a process of auditive troubleshooting commercial production adapts the sounds of its artifacts to the assumed needs of the consumers and the rebriefings of the clients – at least in the final phase of the design process. This division of labor, which often involves opposing ideologies from different kinds of sound expertise, already reached the limits of its efficacy several years ago.

Now new design challenges go beyond isolated sound sources, objects and independent works to be designed or studied. Instead we are now faced with complex networks of intertwined and overlapping spaces, environments and artifacts that have their individual sound effects. Our urban surroundings and our living spaces, our headphones and our public spaces, our screens and our user interfaces. The increasing range of our experiential realms.

### **The knowledge of sound**

Acoustic design is a form of auditive communication based on the physicality of the listeners instead of available technologies. This kind of sound design requires knowledge of all of the previously mentioned disciplines and professions that work with sound. Pure necessity – whether of a cultural-social or economic-urban nature – reunites these disparate professions and disciplines of sound. A new profession and a new discipline results: the investigation and design of sonic environments – Sound Studies / Acoustic Communication.

Different types of knowledge come together in Sound Studies – ranging from design to technical expertise, a blend of science and art. They are a needed complement to Visual Communications, which is now well-established at colleges and universities for art and design.

The individual disciplines and subjects still remain independent areas of knowledge with their respective history, reputation and professional requirements.

However, the systematic combination of the Anthropology and Ecology of Sound and Experimental Sound Design with Audio Media Design and Acoustic Concept enables us to train individuals for professions that acoustically determine our environment – Sound Designers and Sound Consultants. But Sound Studies is not fields of study.

Sound Studies is compilation of interests and skills, sensory perception, knowledge and experience that are incorporated and conveyed by the four areas of study previously mentioned. Up until now the combination of this kind of sound expertise only occurred through lucky happenstance, or it was the result of one-of-a-kind specializations. Sound Studies now provides an opportunity for focused instruction and learning.

What skills are entailed in Sound Studies? Let me briefly outline the four areas of knowledge that make up Sound Studies.



## ***1. Communicate a listening experience***

As I initially illustrated and described, getting to know a sound environment is a challenging endeavor – sounding out how it affects individual and personal sensibilities and perception. Technical instruments are not much help in this situation, because we are now entering the realm of sound narrative, the stories of self-portrayal, the descriptions of an individual's perceptive predisposition and all the diverse auditory social situations that someone experienced. This is all necessary in order to give a comprehensible explanation of why someone perceives – or doesn't perceive – a given sound environment in a particular way!

In Sound Studies you learn the equal value of an approach based on Cultural Studies based and the personal narratives surrounding a particular sound experience. This is the only way that we can truly understand the different types of sounds that affect us and other people. This is a focal aspect of the Anthropology and Ecology of Sound.

## ***2. Perform Sonic Experiments***

When we engage with a given sound environment and alter it for a brief period of time through interventions or change it for an extended period of time through installations, these sound experiments are naturally based on both the technical conditions of sound propagation and the narrative descriptions of our own sound experiences. Knowledge about the history and technical possibilities of sound experiments within sound art, audio art and electro-acoustic music is absolutely necessary. Performing a sound experiment does not mean starting from scratch. Instead it is part of a continuum. As in experimental scientific disciplines, current collective efforts to investigate sound environments build on previous achievements with new and untried experimental setups. Sound Studies teach both the technical and artistic fundamentals of experimental settings in various fields of sound art. Experiments are performed within sound environments that have a determining impact on our lives and current realm of experience. This is the work of Experimental Sound Design.

## ***3. Direct the Sound of the Media***

The majority of the sound environments with which we are confronted are clearly media environments. Environments that surprise us and envelop us at the workplace, in residential spaces, in public spaces and in urban areas used by private businesses – and of course in various theatres of entertainment. Up until now these media environments have not usually been designed with the comprehensive sound experience of the given environment in mind. They have often been implemented to create a spectacle instead of taking into consideration the ears and physical make-up of the listeners.

Concert halls are acoustically designed much like blockbuster films or pop music productions. However, most of our ordinary experience with the media products of television, radio, information stands or entertainment software has a strangely crude and vague quality that would never be a component of visual design! (This has been confirmed in our conversations with owners of private radio stations, who see a great need for professional training programs in sound.)

Sound Studies teaches students to design media-based sound environments – a process of directing and orchestrating sounds in media. This is not conceived as a self-serving demonstration of technical accomplishment but as a reflection of the actual auditory capacity of the audience to hear and process sound. This is the focus of the Audio Media Design.



#### ***4. Design Sonic Environments***

The core skill of sound design and sound consulting is the ability to create clear and meaningful concepts for sound environments. Studying sound means learning to view a sound environment as a synthetic product of the man-made world we inhabit and not as a predetermining condition. People are forcibly subjected to these environments, which have substantial impact and effect!

Sound Studies gives students the conceptual ability to critically manage and direct a sound design process using all possible means for creating sound and a full range of media, genres and sound environments. As previously mentioned, this not only includes physical situations or environments but also digitally-based virtual environments, such as the broadcasting range of the mass media. Sound Studies thus introduces the term and specialization of Acoustic Concepts into professional sound design.

#### **The Sense of Communication**

In Media Studies there is currently talk of a 'sonic turn'. Of course, this caters to us in Sound Studies, but we can't stop there.

Simply to promulgate the euphoric praises heaped upon the role of sound and listening in newspaper articles and popular journals over the last twenty years – that would be too shortsighted. What really interests us is a fundamental change in the attitude towards the design of our surroundings.

We would reformulate the question "How should we design our environment?" as: Are we aware of the impact that our design, technology, creative decisions and theoretical approach will have on the listening experiences of coming decades and centuries in our media-saturated, artificialized environments?

This question points away from the coupling acoustic communication with visual communication – towards a new project of understanding the entire world of artifacts in their diverse sensory manifestations as conscious design.

The step of viewing acoustic communication as a supplement to visual communication is thus only an initial amplification of design as a discipline that assumes responsibility for the diversity of the sensory input that we receive – smells, taste, touch...

In this sense, the Post-graduate Course of Study, *Sound Studies / Acoustic Communication* is only the beginning. An initiative that we have been working on together in cooperation with the Vice President of the University of the Arts, Professor Peter Bayerer, and Professor Martin Rennert from the Faculty of Music along with other professors and teaching staff at the university. A project that has received financial support from the Federal Ministry of Education for well over a year. The test phase of seminars and workshops has already begun, and as of Winter Semester 2004/2005 courses will be offered as a new post-graduate program at the University of the Arts. An advanced degree, professional training. This course of study is not a supplementary, minor inquiry. With this new beginning it is dedicated to a central issue – the sound of our daily life. Sound Studies determine how bearable, acoustically pleasant and livable the design of our lives will be in the future.

