

### **Three permanent sound installations at a central square (Mariatorget) in Stockholm**

These sound installations originate from an ongoing research project. See the abstract, below, and also the attached paper with a thorough description.

The present sound installations beats a new track by combining *acoustic design* with *sound art research*, integrating methodologies based on *real-time acoustic simulation* and application of *psycho-acoustic methodology* for validating simulations and for evaluating perceptual, emotional and behavioural effects on visitors to public open spaces. The ongoing research project, financed by the Swedish Research Council, is executed by the University College of Arts, Crafts and Design (Björn Hellström), the Department of Psychology at Stockholm University (Mats E. Nilsson) and the Interactive Institute (Peter Becker and Peter Lundén), all in Stockholm, Sweden.

#### *Abstract*

The research question is “How to develop and apply acoustic artifacts and design methodologies for improving soundscapes in urban outdoor spaces?”

In the project, this research question is demarcated to two specific types of urban outdoor spaces – city-park and city-square – and to two types of acoustic design artifacts. These are:

I Dynamic promotion of qualitative site specific sounds (e.g., the overall site specific sonic atmosphere, sounds from activities, birds and fountains), which creates an improved soundscape.

II Sound-art installations, which creates delimited auditory sub-spaces within the park/square.

#### *Purpose*

1. To provide two case-study examples of artistic soundscape improvement in a noise polluted city-park and a city-square. The case-studies will serve as models for future applications of the new acoustic design artifacts developed within the project.
2. To create and validate an innovative acoustic design methodology based on state-of-the-art real-time acoustic simulation tools integrated into the design process. The methodology will be validated in psychoacoustic listening experiments and field studies.
3. To determine the potential of the two acoustic design artifacts (I: dynamic promotion of qualitative site specific sounds, and II sound-art installation) for providing pleasant and restorative soundscapes, in order to strengthening the social interaction as well as the spatial and aesthetical qualities in noise polluted city parks/squares.

### **Three permanent sound installations in a shopping mall in Stockholm**

Urban Sound Institute (USIT), [www.usit.nu](http://www.usit.nu), has recently installed three permanent sound installations in a shopping mall in Stockholm City (Gallerian, Hamngatan).

The sound installations aim to understand and develop sound as part of urban space in terms of architectonic, aesthetic and cultural qualities including developing knowledge on spatial qualities of sounds, and on how people interact with these qualities.

USIT consists of two architects/sound designers with musical backgrounds (Catharina Dyrssen, Björn Hellström), two composers/sound artists (Anders Hultqvist, Staffan Mossenmark, and one acoustician/sound designer/music producer (Per Sjösten). The team connects academic and professional practice, primarily between the Academy of Music and Drama at Göteborg University, the Department of Architecture at Chalmers University of Technology, The Royal University College of Arts, Craft and Design (Konstfack) in Stockholm, and Tyréns AB.