

## **Annual Conference - Thursday 6<sup>th</sup> June 2019, Manchester Speakers and Abstracts**

### **Bridget Shield (LSBU) The prevalence and impact of hearing impairment in the UK**

Hearing impaired people form a large body of 'vulnerable listeners' to whom careful consideration must be given in the design of the acoustic environment. Recent data on the prevalence of hearing loss of different grades, and across different age groups of adults and children in the UK, will be presented. The psycho-social impact of hearing impairment, including effects on mental and physical health, will be discussed. Also presented will be the current figures for the use of hearing aids, together with their benefits and disadvantages. The implications of hearing impairment for the acoustic design of the built environment will also be considered.

### **Emma Greenland (Anderson Acoustics) Children with Hearing Loss in Mainstream Classrooms and implications for acoustic design**

The acoustic strategy for inclusion in mainstream classrooms is an important issue for the Department for Education, which has committed to ensure that *people with disabilities, including those with hearing impairment, must not be placed at a disadvantage* in the design of new schools. To find solutions for this challenge it is first necessary to understand the prevalence of children with hearing loss (and other special hearing and communication needs) in mainstream classrooms. The results of a study to understand this prevalence are presented, using both the Government's School Census, and National Statistics for special educational needs in England. This information may be used to identify reasonable adjustments, including classroom management strategies and provision of assisted listening systems, to improve access for children with hearing loss in mainstream classrooms.

### **Lore Thaler (Durham University) Echolocation in People**

People use vision, hearing and touch to sense their environment and to go about their daily lives. While touch is particularly helpful to explore the proximal world, vision and hearing have the opportunity that they can be used to sense the distal world. With regard to hearing, everybody is aware of the fact that people can hear the distal environment when it makes a sound, such as a car passing by or a person speaking. People are less aware of the fact, however, that we can also sense the distal environment through sound echoes, such as the reverberation of a step in a building. In the literature there are many reports of blind people

who make mouth clicks and use the echoes of the clicks to navigate the environment. There is also plenty of footage on the internet that shows blind people who use echolocation to ride bicycles, go hiking or navigate familiar and unfamiliar cities. In my talk I will describe some of what is currently known about echolocation in people on the behavioural and neural level. I will also discuss how the ability to echolocate is affected by factors such as background noise.

### **Rupert Thornely-Taylor The challenges posed by the WHO Environmental Noise Guidelines for the European Region**

Decision-makers of all kinds have, since the turn of the millennium, resolved the problem of assigning numbers to noise law and policy by referring to guideline values in the WHO publication “Guidelines for Community Noise” of 1999/2000, with varying degrees of justification. Now the Environmental Noise Guidelines for the European Region 2018 have introduced some interesting complexities and difficulties. What should we do with the new numbers? Which of the old numbers are still valid? Do we need supplementary guidance in the UK to make sense of it all, and what should it say? The 2018 document is far from easy to interpret, and there is an iceberg under the tip of the executive summary which this presentation will seek to explore.

### **Charlotte Clark (Arup) From evidence to Guidelines: an overview and critique of the methodology underlying the WHO Environmental Noise Guidelines.**

This talk will present an overview of the methodology used to define the WHO Environmental Noise Guidelines for the European Region. The talk will not only describe the process, but also describe the difficulties and challenges associated with using the evidence for environmental noise effects to inform the Guideline values.

### **Lindsay McIntyre (KSG Acoustics) Agent of Change – Saviour of Grassroots Music Venues?**

As city and town centres across the UK lose their traditional high streets and shops, Planners create new dynamics with increasing levels of residential use mixed in with existing commercial and entertainment uses. Amid the desire to create vibrant mixed-use spaces, increasing numbers of stories are emerging of music venues, in some cases established for years, suddenly under pressure from complaints generated by new residents distressed by levels of noise.

Agent of Change is a common-sense principle and not a novel one. It simply puts the onus on the party effecting a change in the vicinity of an established use to demonstrate that the design is adequate such as not to adversely affect the existing use. In Scotland, a Music Industry steering group is working with the Scottish Government to crystallise the principle of Agent of Change into functional legislation to ensure that it serves its stated purpose of protecting existing music venues.

This session explores the aspirations and practicalities of using the Agent of Change principle to protect grass roots music venues, including the process of enshrining the principle in law, and addressing the premise that Agent of Change is effectively carte blanche for noise generators. There will be the opportunity to explore as a group what supplementary guidance might be required to support implementation of Agent of Change, and the challenging issue of what design standards and mitigation strategies might be appropriate.

### **Dani Fiumicelli (Temple Group) Draft IOA Good Practice Guide to Noise from Places of Entertainment and pre-consultation discussion**

The current IOA Good Practice Guide on the Control of Noise from Pubs and Clubs was published in 2003. At that time the evidence base was considered insufficient to derive quantified sound level based advice. However, since then, the evidence base has grown considerably, and there have been substantial changes in the regulatory framework that apply to noise from places of entertainment. Consequently a small working group has been working on revising and updating the guide, and a working draft will soon be made available for consultation with IOA members and other stakeholders.

This presentation will describe the rationale for the changes, the scope of the draft document, introduce the concept of risk based assessment and propose an entertainment noise assessment framework with qualitative and quantitative impact evaluation criteria. The presentation will also include case studies to illustrate how the draft Good Practice Guide might be used. The session will consider the existing advice regarding the audibility of music noise and discuss how this fits with current policy in regard to adverse, significant and unacceptable effects, and in the context of nuisance law. The session will include the opportunity to ask questions and the next phase of the consultation on the draft will be described.