**Acoustic Space, COMMUNITY and virtual soundscapes**

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**Abstract**

The acoustics of a space, particularly an enclosed one, has been extensively studied over the last 100 years, resulting in a significant body of theoretical and applied literature. Although the acoustic complexity of real spaces may exhibit subtleties that require further research, the general principles involved seem well established. However, the perception of acoustic space – how we interpret sound as creating a sense of space – is not well understood. Perhaps the greatest impediment is our reliance on visual models of space which are relatively stable and detailed, giving us the impression that space is a fixed entity through which we can move. Auditory space, on the other hand, is constantly in flux, created moment by moment and variable to each listener. In the most general sense, acoustic or auditory space is at the core of acoustic ecology, that is, the relationship of individuals to their environment as mediated by sound, including the creation of what I call the acoustic community. Recently, a number of composers have begun studying the acoustic spaces created by various soundscapes, with the aim of evaluating the quality of their design, as well as finding inspiration for what is generally termed soundscape composition. Multi-channel reproduction techniques have greatly aided these latter efforts, and created a virtual three-dimensional design field comparable to architecture. The presentation will discuss issues surrounding acoustic space, soundscape design and multi-channel soundscape composition.

**Biographical Note**

Barry Truax is a Professor Emeritus in the School of Communication (and formerly the School for the Contemporary Arts) at Simon Fraser University where he taught courses in acoustic communication and electroacoustic music. He worked with the World Soundscape Project, editing its *Handbook for Acoustic Ecology*, and has published a book *Acoustic Communication* dealing with sound and technology. As a composer, Truax is best known for his work with the PODX computer music system which he has used for tape solo works, music theatre pieces and those with live performers or computer graphics. In 1991 his work, *Riverrun*, was awarded the Magisterium at the International Competition of Electroacoustic Music in Bourges, France. Truax’s multi-channel soundscape compositions are frequently featured in concerts and festivals around the world. Since his retirement in 2015, Barry has been the Edgard Varèse Guest Professor at the Technical University in Berlin, Guest Composer at the 2016 BEAST Festival in Birmingham, and co-editor of the *Routledge Companion to Sounding Art* (2017) which includes a chapter devoted to the topic of this presentation.

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