## [Book] Spaces Speak, Are You Listening? Experiencing Aural Architecture (by Barry Blesser and Linda-Ruth Salter)<sup>1</sup>

Reviewed by João Miguel Pais

Spaces Speak, Are You Listening? is the product of a collaboration between two researchers of different areas: Dr. Barry Blesser, an MIT graduate and respected audio engineer with special contributions in the study of reverberation algorithms and its perception, and his life and work partner Dr. Linda-Ruth Salter, a graduate in interdisciplinary studies. This 400-page book is dedicated to Dr. Blesser's integrating concept of "aural architecture", which he is actively researching since five years ago, but which has been one of his personal interests for several decades.

The mixture of both authors is particularly fruitful in the novel approach taken to explore the phenomenon of hearing, inhabiting and experiencing space on both conscious and subconscious levels. Instead of evaluating the acoustical phenomenon on a purely technical view (that is, mainly presenting formulas related to air pressure, something which has already been quite well explored in many more specialized publications), the authors focus their research on the relations between space and sound from a more global perspective, namely the experience of aural architecture as experienced in artistic, social, historical and philosophical contexts.

Spaces Speak examines the authors' concept of aural architecture, which encompasses not only the acoustic, but also the social and behavioural characteristics that are the product — unfortunately most of the time unreflected — of any acoustic space (ranging for example from a church, a room, an alcove, to a small group of persons speaking in a corner at a cocktail party). By introducing the reader to a number of concepts such as aural architecture, auditory spatial awareness, aural awareness, sonic illumination, auditory memory, social spatiality, acoustic horizon and acoustic arena, auditory channel, etc., the authors examine how real human interaction occurs in different acoustical/social spaces, how humans use their hearing organs to orientate themselves in any space — for example, the extreme case of visually-challenged individuals who can hear any space and navigate it without hesitation — and how spaces can be aurally designed and manipulated to suit a specific function (be it artistic or social) and to influence the people inhabiting and experiencing it.

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Blesser also traces the history of aural spaces from pre-history to the present time, from religious and social environments, through the aural consequences in the era of audio-engineered, amplified industrialized society, to subjects specificly related to the field of musical performance (which he calls the "aural arts"). In the latter he analyses the continually-evolving (and never conclusive) relations between musical works, musical performers, musical spaces, and their abstract or conceptual counterparts — for example, the abstract space in which a work performed by abstract performers would resonate to its full (and logically, also abstract) glory.

The chapter dedicated to "Inventing Virtual Spaces for Music" is of particular interest to the electroacoustic composer, although the specialized reader may already be familiar with much of the content. Here Blesser reports on technological tools (both widely-available and obscure hardware and software) to compose with space used by composers since Varèse up to the BEAST system, as well as the film industry's role in surround sound technologies. Blesser also defends the role of technological amplification as the ultimate *aural architect*, as it allows for "lectures in the morning, Wagnerian opera in the afternoon, and Gregorian chants in the evening" — a solution that wouldn't be accepted without some reluctancy by many concert-goers familiar with these musical traditions.

Further chapters deal with the more mundane aspects of how some of the existing technological solutions concerning spatial diffusion in the industry were developed and subsequently implemented: as is typical in *Realpolitik*, the allocation of necessary resources to the development of a particular discipline results from the materialization of a specific interest. Elsewhere some of the consequences of the modern industrialized acoustic environment to the human subject as species are discussed, including how our hearing capabilities can still help us orient ourselves in our environment, just like our remote ancesters had to do in order to survive. By understanding how we are affected by space, we can learn how to modify our environment, at least to the extent we're allowed to, in order to make them more suitable to the functions we wish them to fulfill.

As stated in the end of the introduction, *Spaces Speak* is written for several types of readers: for professionals working in any of the fields discussed in the book, for the general curious reader, and for lovers of the aural arts. Its goal is not to make experts of the readers, but rather by connecting knowledge from different areas at a general level, to sensitize them to the acoustic properties of spaces designed and/or inhabited by humans, and in particular to the musical, religious, political and social ramifications involved in the communicative processes that occur at the acoustical level. Because of the straightforward way the book is written (the text is elaborated as a well-flowing discourse, with no formulas or diagrammes whatsoever), it might not be fully satisfying to the reader who desires to be more technically informed, although it broadens up one's perspectives to a great field of ideas that could be followed up at a later time. An even more detailed, technical explanation of each subject would have considerably increased the size of the publication, maybe even enough to produce one book out of each chapter.

An impressive 30 pages of references is very useful, covering a range of subjects, from acoustics to gardening (following the author's wish for a general, interdisciplinary approach). It would have been even better if the references were categorized, facilitating the work for anyone interested in knowing more about the works mentioned in the list.

Although *Spaces Speak* isn't the new, final "space bible" (as stated, more due to logistic reasons than to the capability of the authors), its interdisciplinary approach proves to be quite fruitful by connecting acoustics, psychoacoustics, psychology, behaviour studies, architecture and many other fields that all humans trip on while interacting in any space, be it consciously or not. Its novelty and main point of interest are that the authors have avoided the typical 20th-century approach of one-dimensional, specialized research of a phenomena in an isolated laboratory situation, making it clear that as complex as the human reality might be, and how strongly the "human factor" influences one's perception, it is still possible to gain a good enough understanding of the situation in order to manipulate it.

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## **Biography**

Composer and improviser. Studied in Lisbon, London (RCM) and Freiburg (Germany) with mathias spahlinger and Mesias Maiguashca. Additional contact with Emmanuel Nunes, Salvatore Sciarrino and courses in Darmstadt. Between 1997 and 2001, with Diana Ferreira and Luís Antunes Pena, directed the Jornadas Nova Música in Aveiro, Portugal, a festival dedicated to new music. Currently lives in Berlin.

## Other Articles by the Author

"Salvatore Sciarrinos Variazione zu uno spazio ricurvo." Musik & Ästhetik 41 (January 2007).