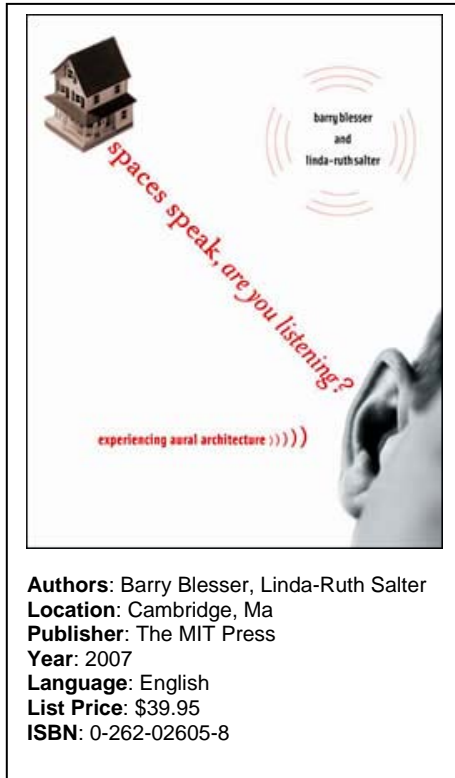


## Spaces speak, are you listening? Experiencing aural architecture

Reviewed by Stefania Antonioni



How is a kitchen different from a living room, or a concert hall, or a Catholic church? It's not simply a matter of the specific furnishings that support the pragmatic function, or definition, of each of these spaces. Rather, differentiation of form and function rely on the unique architectural design of each of these spaces. This includes the specific auditory attributes and stimuli that add to our perceptions of these spaces, and support the functions that we assign to them.

Because we are socially and culturally accustomed to the overwhelming power of the visual dimension, we think that our experience of places and spaces happens primarily through our vision. In reality, the experience of a space, and consequently of the architectural design which helps organize and humanize the space, also relies on auditory elements. Architectural auditory elements support the specific purpose for being in that space. Because architectural artifacts are a part of culture, they can tell us something about the society that produced them. Furthermore, these artifacts inform us of the prevailing relationships and power struggles within that society, and provide spatial support for these interactions. The acoustic development of architecture provides additional clues to the meaning of cultural experiences that are located in specific spaces.

Although interest in "other" sensory fields includes such contributions as A. Corbin's *Social History of Smell*, A. Gusman's *Anthropology of the Sense of Smell* and D. LeBreton's very recent *Taste of the World; An Anthropology of the Senses*, as well as various studies of synesthesia in art and technology, leading to M. McLuhan's pioneering approach to media, one of the missing pieces to understanding and appreciating various sensory fields is certainly the aural dimension of architecture.

Blesser and Salter's book takes us to that mostly unexplored territory, and perhaps because of that, it is all the more fascinating. Their work uncovers the aural dimension of architecture in all its material aspects, and also includes the undeniable involvement of the social system and of the culture which it reflects. One of the merits of the book is precisely that of attempting to structure, as an object of curiosity and research, an area that has been explored very little, especially by the contemporary art world (one of the recent exceptions to this is the exhibit entitled "Silence. An exhibit to listen to," recently organized by the Sandretto ReRebaudengo Foundation of Torino). In addition and equally importantly, it rejects a purely didactic and easily deterministic approach. Through the contribution of various disciplines (physics, acoustics of course, the history of art and architecture, human physiology, sociology), the book attempts to make the frame of reference as complete as possible in the search for ways to interpret the phenomenon itself.

Listening, in fact, is presented as one of the processes leading to cognition and therefore to be understood as the individual's inactive internal reproduction of what can be considered the external space. Listening has socio-cultural connotations, in that aural learning depends on cultural as well as physical factors. If a culture emphasizes the importance of hearing, it will then be more attentive to auditory phenomena and will therefore try to reproduce this type of familiarity and aural knowledge among its members. But, the hearing activity is

also necessarily specific to an individual: “Listening is more than hearing: it is more than sensing, detecting, and discriminating sounds. Listening is the act of making sense out of an aural experience by incorporating all that has been remembered from previous experiences.” (p.328)

Looking at the intermingling of social, cultural and individual elements - the latter seen in its emotional as well as physiological dimensions - in defining the relationship between the manipulation of space and its sonic output, the authors take us through a historical survey of places and major figures in the study and development of the aural side of architecture. In this way they provide a type of evolutionary guide to their topic of research.

We start with Greek theater which, through its structure and acoustic elements, had to enable the attendance of a very large number of people to its performances, which propagated and rendered tangible the value of democracy. An important passage in the book presents the construction of the sixteenth-century Elizabethan theater. Theater at this time didn't require large spaces because its function, unlike Greek theater, was not political but rather was one of pure entertainment, thus introducing the first privatization of theater. According to the authors, a further subsequent and interesting change came about with the Protestant Reform, which shifted resources and institutional power from religious to lay organizations. This put an end to the Catholic Church's dominance of the aural architecture of public spaces, which it had held until then.

For Protestants, “churches were more a utilitarian place for sharing a religion rather than a vision of a heavenly home. The service was led by a minister whose liturgy focused on words, ideas and reasoning. In support of these theological changes, a new generation of church builders began to emphasize acoustic clarity and spatial intimacy through lower ceilings and smaller room size. Automatically, with smaller spatial volume and denser congregations, the new architecture produced shorter reverberation times.” For example, “the original Thomaskirche in Leipzig, the space for which Bach composed ‘The Passion According to Matthew’ and the ‘Easter Mass’, was acoustically more like a small concert hall than a grand cathedral... Bach and other composers adapted to these acoustic changes by altering their phrasing and inventing new musical forms.” (p.100-101)

Later developments range from the first London music halls, which were small in size, to the modern concert hall whose dimensions were expanded to increase profits. This change in size simultaneously had an impact on the type of architectural expedients that were used to enhance sound capacity, and also led to a change in orchestra size and in the musical instruments that were used.

Naturally the final passage is devoted to the creation of ‘virtual’ spaces through the multi-faceted experience of digital music. To give an example of how listening can change our perception of space, consider that using stereo headphones places the performance space inside our head. Another similar but less extreme example is the automobile which, in the desire to create a private space for transportation (already noted by G.Debord who sees it as a further factor of social fragmentation) produces new ways to relate visually and aurally to space. As a result of this process, hearing space is individualized and privatized, thus changing the way we experience it.

Today we are able to decouple spatial experience from physical reality. Achieving a more fluid, dynamic space through digitally-produced sounds, combined with acoustic spaces in which one's experience is mediated, can lead to the formation of emotional listeners who are not capable of evaluating or describing their aural experience. On the one hand, this would mean both a wider number of listening processes, and also of the ways that we experience space as increasingly focused on the individual. On the other hand, it would lead paradoxically to the impoverishment of the sonic environment and therefore a smaller variety of aural experiences, leading in turn to a lesser ‘knowledge’ of space in general.

Nonetheless, if we accept as a theoretical frame of reference the fact that this shift is the result of the co-evolution and co-determination between different dimensions (and sometimes the authors don't always appear to be consistent on this matter), we can't help but consider that these are new and diverse ways of feeling,

perceiving, experiencing and imagining space. I find it interesting - although for some people it can be disturbing – to consider possible developments from the application of a type of architecture that knows how to enhance its own aural elements so as to alter emotions; this is something that we already see in part. I'm thinking, for example, of those marketing trends that define themselves as being sensory, emotional etc., or the immersion effect sought by the film industry from Dolby Surround to IMAX, where panoramic viewing is accompanied by a type of panoramic listening.

In short, analyzing the relationship among the different sensory dimensions, the human experience, and the creation of a different concept of space has only just begun.