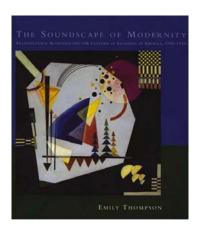
Spaces Speak, Are You Listening? Experiencing Aural Architecture

BARRY BLESSER and LINDA RUTH SALTER The MIT Press, 2006 436 pages, illustrated \$39.95 (cloth)



The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900–1933

EMILY THOMPSON
The MIT Press, 2002 (new edition, 2004)
504 pages, illustrated \$28.95 (paper)



Sound culture studies, an interdisciplinary field of scholarship with a history going back several decades, has until recently located its home base within academic departments of film, music, media, and communication. An emerging interest in this area is marked by an increased attention toward the interrelations between sound and space, signaling the beginning of a dialogue with the field of architecture. The Soundscape of Modernity and Spaces Speak, Are You Listening? are exemplars of this development, which on one hand links sound culture studies to architecture and on the other expands the architectural study of sound to a territory beyond its conventional boundaries—as defined by the "hard" science of acoustics.

Emily Thompson, an assistant professor of history and sociology of science and the author of "soundscape" Soundscape, describes "simultaneously a physical environment and a way of perceiving that environment ... both a world and a culture constructed to make sense of that world" (p. 1). This expands the orthodox definition of the term coined in the 1970s by R. Murray Schafer, who explained it as the collection of sounds of a place (The Soundscape: Our Sonic Environment and the Tuning of the World, Destiny Books, 1993 [1977]). Thompson's definition covers the practices and institutions related to the production, representation, and consumption of the sounds of a place or an era. Her work is therefore situated within the broader body of research clustered around the critical histories of modernity and representation. Existing studies in this area, as exemplified by the works of Jonathan Crary and Edward Casey, had been centered on visionperceptual mechanisms, representational methods, and sociocultural analyses of the institutionalization of seeing. Thompson's book follows similar lines of thought, considering sound as the modus operandi of twentieth-century modernization processes.

Soundscape discusses the early twentieth century as the period in which acoustics was acknowledged as a field of modern scientific inquiry and was rapidly institutionalized. Sound propagation formulas and intensity measurements, which originally emerged from

the acoustic design of auditoria, found instantaneous application for social control in the form of noise abatement laws and regulations. Industrial developments around the field made it function in the service of privatization and sonic sterilization of work and domestic spaces. Commodification of sound and respectively that of silence, studies that were carried out with the aim of understanding the effects of sound and music on personal behavior and productivity, are some of the cases that Thompson discusses to fundamental illustrate sound's role within modernization.

The book ends in the era when electroacoustic manipulations appear in spaces of music and broadcast. The author describes what took place during these transformations as a "schizophonic" divide, caused by the separation of spaces for the production and consumption of sound. This period begins with the emergence of spaces for mass spectacle, aiming to cater to large audiences. Early music halls relied on real architectural acoustics, which served as the most definitive factor for their unique character. Since their scale and scope went beyond what is manageable within the physical limits of natural acoustics, spaces of mass spectacle like the Radio City Music Hall were designed to use a *virtualized* approach to create desirable acoustic conditions. This was made amplification. possible bν electronic artificial reverberation, and televised broadcast technologies sometimes just to enhance, yet more often to completely suppress and override the listening conditions that would have been characterized by the natural acoustics of auditoria.

Thompson's research is based on a critical analysis of an impressive amount of original material most of which is unearthed from industry archives, public records, museum collections, and other primary sources. The book is generous in its use of visual illustrations, including some architectural drawings. It is therefore an equally valuable resource for design students, practicing architects, and scholars of sound culture.

The second book, *Spaces Speak* is the work of Barry Blesser, an engineer and scholar of acoustics,

and Linda Ruth Salter, a scholar of interdisciplinary research. The signature theme of the book is "auditory spatial awareness." As described by the authors, auditory spatial awareness is "more than just the ability to detect that space has changed sounds; it includes as well the emotional and behavioral experience of space" (p. 11). It is the psychophenomenological effect that the sonic experience of space casts on us: changing our mood, affecting our spatial orientation, influencing our aesthetic perception, and enhancingor degrading—the quality of listening to music or voice in that environment. "Aural architecture" is the term they assign to the structure of these experiences, and an "aural architect" is the professional who designs such sonic encounters. The authors reveal that every one of us, whether knowingly or unknowingly, engages in the practice of aural architecture in our daily activities. When we pick a seat in a restaurant to be close to the musicians and away from the kitchen noise or when we isolate ourselves from the soundscape of the city by tuning into our cell phones or music players, we function as aural architects. In both these examples, we are essentially shaping our own auditory spatial experiences. In their discussion of aural architecture, Blesser and Salter elaborate the ways spaces can be professionally manipulated in order to effectively and creatively form sonic experiences. Spatial configuration of forms, acoustic materials, and arrangement of the reflective surfaces form the basis of aural architecture, which is then made complete by the "sonic illumination" generated by the sound sources. An aural architect, who also exercises control over the design of the sound sources, becomes a "soundscape architect" (p. 66).

Blesser and Salter acknowledge a previous body of work on spatial sound culture and attentive listening going back to the lineage of soundscape research originating from the World Soundscape Project (WSP) at Simon Fraser University during the late 1960s. Spaces Speak inherits and expands some of the spatial vocabulary that WSP developed; it not only revives this important field of research by rethinking the same concepts in light of more recent discoveries in the psychology of spatial listening but also contributes to the field through a detailed analysis and discussion

of examples from world architecture from different periods and cultures, along with an analytical survey of the state-of-the-art technologies for electronically enhanced acoustics. The authors also provide a chapter on aural architecture as an interdisciplinary practice, reflecting on the question of professional identity, and another chapter that discusses the evolution of auditory spatial awareness as a psychoacoustic artifact.

These books function as ear-opening exercises. They intend to teach us to listen carefully to our environments and not to take lightly what we hear. Soundscape invites us to consider how spaces sound and reinterpret the ways they do as part of the larger trajectory of modernization. Spaces Speak carries us to an elevated state of auditory awareness that will sustain us through our future encounters with places. Sound does not operate as an independent medium. It attains its metaphorical significance partially from being the fundamental antithesis of vision. Consequently, any study of sound serves as an implicit reminder of all the other modes of perception and representation that we should give thoughtful consideration in understanding and conceptualizing our experience of space.

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