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BOOKS

**NOISE, WATER, MEAT:
A HISTORY OF SOUND
IN THE ARTS**

by Douglas Kahn. MIT Press, Cambridge, MA, U.S.A., 1999. ISBN: 0-262-11243-4.

*Reviewed by Yvonne Spielmann.**E-mail: <spielmann@medien-peb.uni-siegen.de>.*

How do we measure the impact of sound in twentieth-century arts and where is its place in the avant-garde? What is the significance of sound in relation to music as a traditional art form and in relation to quotidian, ordinary and surrounding noise? Is there a specific set of characteristics that qualifies sound or is sound in itself a shifting parameter, varying according to the specific practices and technologies of the auditive at a given time? Interestingly, there is not much scholarly research and writing regarding the introduction of "noise" into music. Nor is there much work that deals with the categorization of sound and music with regard to extra-musical or musical qualities in "new" sounds that surround us in the electronic age that would help us analyze how "resident noise" and "significant sound" were introduced into earlier artistic systems.

Artists working with new visual media have for some time been interested in crossing the boundaries between hearing and seeing. Film pioneer Germaine Dulac "composed" film like a visual symphony. In the 1970s, video artists Steina and Woody Vasulka developed computer tools in order to explore a

new vocabulary and directly manipulate music and image, transferring sound into visuals, while Jean-Luc Godard experimented with his "son/image" productions with video as a medium to dissociate and recombine ordinary sounds and images. More recently, composer Michel Nyman has worked towards an intermediate image-sound relationship in cooperation with film-maker Peter Greenaway and discusses common structuring principles in his theoretical considerations on hearing and seeing.

Filmmakers, painters and writers have not only applied musical patterns in their work but have also undertaken structural comparisons between image, sound and text, questioning how a single medium works in relation to the senses and sensory perception. In the same way, audio arts in the twentieth century have shown an emerging concern with extra-musical elements that fundamentally change the idea of music through the introduction of machine noises. Expansion in the field of sonic arts can also be seen in the Dadaist "simultaneous poem" and in voices that articulate the actual and/or textual body.

Douglas Kahn's *Noise, Water, Meat* surveys the relationship between sound, music and noise in the period from the late nineteenth to the mid-twentieth century, introducing an overdue discussion of the development of acoustic concepts that, while clearly related to similar ideas in the visual arts, also have a history of their own. The book demonstrates that the multiplicity of audio arts mirrors an increasing complexity within artistic practices where multimedia and intermedia approaches bring together elements of sound, image and text. Given such diversity, we may conclude that there is no single artistic medium, but a constant process of interference and synesthesia.

In introducing this topic, Kahn outlines significant lines of development that explore the differences between noise and music and between sound and music. The understanding of these crucial paradigms is set out in relation to debates on sound as an internal or extra-musical quality of "aurality in itself," which also reflects upon the inven-

tion of machines that reproduce and record sound. Kahn then points to the prevalent technological approaches that expand the realm of music and sound into "all sound" (based on the invention of the phonograph) and discusses the transposition from "all sound" to "always sound." John Cage made this distinction after listening to sounds such as the tones of the nervous system and of blood circulation in an anechoic chamber. Finally, Kahn gives a close "reading" of artistic practices that have shaped the idea of music on the whole and, in a precise and staged argument, describes the interplay of sound and technology, namely "inscriptive practices," from an historical perspective.

Kahn starts with the assumption that "none of the arts is entirely mute" and that the phenomenon of sound enters the world of music through the emergence of "inscriptive techniques," beginning with Thomas Edison's invention of the phonograph. The phonograph foreshadowed a major shift from a single sound to a world of all sounds, as exemplified in the development of radio and sound for film. As Kahn states repeatedly, it is the artistic avant-garde that strategically responds to technological challenges to use so-called extramusical elements in order to expand traditional art forms and to produce a fusion between sound, music and extramusical

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noise. Two movements in particular—the “simultaneous poetry” movement in Dada and the futurist statement on “The Art of Noises” (1913) by Luigi Russolo—appropriated noise as an element of music. These movements effectively pulled the ground from beneath earlier nineteenth-century views that made a hard distinction between sound and music.

In his reflections on these two major historical developments, Kahn stresses the fact of their being “Western.” While the first movement refers to graphic-in-scriptive practices, the second development, that of the futurists, is a conceptual one that involves an avant-garde movement crossing the borders set up in the nineteenth century. In this regard, he particularly highlights Russolo’s concept of “resident noise” as a turning point, dissolving the nineteenth-century demarcation lines between music, sound and noise. As much as reproduced sounds and machine noises changed the sounds of the avant-garde, it was Russolo’s idea of “resident noises” that introduced “wordliness” into the realm of sound and music. The dissolution of the difference between sound and music led to “significant noise” and signified a major breakthrough that found its counterpart in the attempts by John Cage to reduce sound as much as possible to achieve both “inaudible sounds” and “small sounds.” Cage’s central idea that all sounds could be music becomes a prevalent theme of the book, in particular where Kahn’s discussion of “always sound” involves the history of complexity in music, which is highlighted by the theories of cluster and *glissando*, as conceived by Henry Cowell.

Aside from such specialized discourse, Kahn’s study will also interest readers who have a broader interest in the development of various arts practices and the emergence of intermedia features related to performance, happenings, the Fluxus movement and theater. In particular, his discussion of hearing and music makes many connections to similar and parallel approaches in the visual arts. The strength of the book lies in its addressing major twentieth-century shifts in the often-neglected field of sound arts, so that well-known features in the visual arts appear in a “new,” and slightly unfamiliar, light. As a consequence, we gain greater insight into the understanding of art in radical modernism as well as into consideration of aesthetic

features specific to audio arts. This confirms the relevance of Kahn’s research.

One should note the specific focus of Kahn’s writing while bearing in mind current debates on the interrelationship and convergence of various media. Regarding the interplay of music, text and image, this study provides a fresh impulse by shifting the perspective strategically from image to sound. Kahn’s stress on the complexity of aurality counters the prevailing orthodoxy of maintaining the visual as the dominant expressive form of media. Kahn consequently explores the conceptualization of sound in itself and further explains how technological developments, such as recording, help to develop a notion of hearing. The book discusses technologies that allow for the realization of certain audio concepts while at the same time giving a historical background to the material. This allows for a better understanding of the more complex chapters, which examine specific moments and movements in the history of sound, such as the “significant noise” of Russolo’s “Art of Noises.” The study also convincingly accentuates the aspect of war-noises inherent in the idea of noise in the early twentieth century and connects these ideas to a more general approach to immersion. Proceeding from this, the book posits the notion of our being “immersed in noise,” that is, that there is always sound and never silence. Through Kahn’s skillful contextualization, which considers synesthesia and intermedia as driving forces in the development of new musical forms, the non-specialist reader will have no difficulty understanding the impact of Cage’s conclusion that “silencing” means to hear the sounds of silence as music.

Throughout the book, it becomes evident that certain moves in audio—for example, the compression, reduction and reproduction of sound and emphasis on the openness and fluidity of sounds—are closely connected to approaches in the visual and textual arts that expand the limits of a single medium or art. Kahn attributes this connection to the introduction of techniques such as simultaneism, *bruitism* and the use of noise, as well as the dissolution of single musical elements of *glissando* and “Lautgedicht” (sound poetry). He further discusses the dissolution of such dichotomies as inside/outside, small/large, textual/musical and visual/musical as part of this process of expansion.

The book also goes into previously unexplored areas of research, in par-

ticular comparing the flow and flux of sound to the fluidity of water. With intriguing insight, Kahn compares Jackson Pollock’s painterly drippings to John Cage’s water sounds, Yoko Ono’s *Waterpiece*, George Brecht’s “drip music” and, more generally, to the use of actual water in percussion music. The use of water as a compositional device clearly marks a larger shift towards “happening” art, performance and theatricality, which, as the author states, was already being carried out by Pollock.

Where the use of water for “tuning percussion” stresses a contemporary concern with ephemeral qualities in Western music (a concern that has its precursor in Erik Satie, who “was the wettest composer of the time”), the last section of the book discusses physicality and the interrelation of the body and voice in Western culture. By engaging with timely debates on embodiment, Kahn carefully suggests Roland Barthes’ consideration of the voice as expressing the body so that the metaphor of “meat voices” helps to interweave different but related artistic practices of “embodied voices.” In particular, Antonin Artaud’s idea of the “phantasmatic body” and the poetry of Michael McClure, which speaks a “beast language,” suggest that the voice of the body speaks anything else but the body. The example of William Burroughs, who associated the body with a virus, also fosters a view on the relationship of the human body and the textual body where the body is essentially seen as meat.

After reading through *Noise, Water, Meat*, one is even more surprised by the lack of discussion of the history and theory of sound direction in the overriding debates on contemporary arts and media. Discourses predominantly deal with vision and visibility, even when dealing with audiovisual media. The parallel history of sound art is only occasionally touched upon with regard to the avant-garde’s idea of synthesis between all arts (such as music, dance, painting, photography and kinetic). This deficit is also evident in relation to discussions of cinema, a medium that has appropriated devices of sound and music. This may be the legacy of the overriding discourse on arts and artistic practices informed by statements of cultural critics such as Béla Balázs and Georg Simmel, who asserted that the twentieth century was the age of the eye and of visual technical media, namely photography and film. Strikingly, and in contrast to early film theory (for ex-

ample, Munsterberg and Arnheim), which had imagined the possibilities of sound film, most contemporary film theory hardly considers voice, music and sound; it is as if film were solely visual. Moreover, this imbalance between discussions of hearing and seeing is evident in the field of perceptive and cognitive theory, which also privileges visual topics such as the “intelligent eye” or “eye and brain.” Kahn’s book makes a timely and valuable contribution to closing this deficit in the way that sound has been something of a neglected orphan in the larger considerations of twentieth-century arts.

MUSIC, COGNITION, AND COMPUTERIZED SOUND: AN INTRODUCTION TO PSYCHOACOUSTICS

edited by Perry R. Cook. MIT Press, Cambridge, MA, U.S.A., 1999. ISBN: 0-262-03256-2.

Reviewed by Paul Hertz, Academic Computing and Network Services, Northwestern University, 2129 North Campus Dr., Evanston, IL 60208-2850, U.S.A.. E-mail: <paul-hertz@nwu.edu>.

Developed from a series of lectures at the Stanford Center for Computer Research in Music and Acoustics (CCRMA) *Music, Cognition, and Computerized Sound* offers a coherent panorama of the field of psychoacoustics as it pertains to music and computerized sound. The contributors—among them Max Mathews, Roger Shepard, John Chowning and John Pierce—are recognized authorities in the field of computer-synthesized sound and the nature of acoustical and musical perception. The CD-ROM accompanying the book contains audio samples for each chapter, plus source codes (contributed by the editor) for all the samples.

Although specifically intended as a course book for psychoacoustics, with a closing chapter on the effective design of experiments and an appendix of exercises, this book should prove valuable to a wide audience. Computers provide what seems the ultimate level of control over sound synthesis, but it is often hard to know where to begin. Anyone who has ever confronted the problem of determining which parameters of a synthesized sound are acoustically perceptible or meaningful will appreciate the clarity with which the introductory chapters

distinguish the physical parameters of sound from the perception of sound. Building on established research into the fundamentals of acoustic perception, the book proceeds to more complex issues of voice articulation and synthesis, perceptual streaming, musical memory and the haptics of sound production. Computer musicians will find material to suggest diverse directions for experimentation, and multimedia artists working with sound will discover new methods for generating sounds, with the potential for weaning themselves from straight playback of sampled sound and working with real-time synthesis. Some of the perceptual effects documented in the text and on the CD are remarkable in themselves, such as Shepard and Risset tones or the complex effects of perceptual streaming. The level of detail of many of the chapters, particularly when supplemented by the source code, is sufficient to get one started in a variety of sound synthesis techniques. The brief list of bibliographic references at the end of each chapter will lead the reader onwards.

While this book is most valuable as a guide to the uses of state-of-the-art technology for acoustic research, it also sheds light on how human cognitive abilities shape musical structures. Choices of rhythm, melodic variation, chord structure, timbre, orchestration and even the evolution of musical styles over time are partially determined by the nature of the human auditory system. A welcome result of reading this book may be that readers learn to hear natural and musical sounds with a new appreciation of the complex dynamics of sound production, sound perception and the inner logic of music.

THE TULIP

by Anna Pavord. Bloomsbury Publishing, New York, N.Y., U.S.A., and London, U.K., 1999. 439 pp. Trade, \$40.00. ISBN: 1-58234-013-7.

Reviewed by George Gessert, 1230 W. Broadway, Eugene, OR 97402, U.S.A. E-mail: <ggessert@igc.org>.

One of the many changes that World War II brought about was drastic simplification of the way we see ornamental plants. Before the war, plant breeding and art were so closely allied that some writers, artists and plant breeders claimed garden varieties of plants as works of fine art. After the war, art and

plant breeding went their separate ways. Ornamental plants became decorative objects and consumer products, and genetics, which had previously belonged to everyone, became the more-or-less exclusive property of science, business, agriculture and medicine.

The dissociation of art and genetics trivialized not only ornamental plants, but writing about ornamental plants. This genre, which had always been somewhat rarefied, became more than ever a vehicle of escape—an escape into charm and detail, into a parallel universe where nothing uninvited can intrude, not even the last half century. Controversy does not ruffle this realm, and taste is so entirely individual that it is tasteless to discuss.

While no contemporary books explore genetic art as straightforwardly as did Sacheverell Sitwell’s *Old Fashioned Flowers*, published in 1939, several excellent ornamental plant histories that engage aesthetic issues have recently appeared. For example, Jack Goody’s *The Culture of Flowers* examines the class underpinnings of ornamental plant cultivation, Peter Valder’s *The Garden Plants of China* explores a major non-Western gardening tradition, and Gerd Krussmann’s *The Complete Book of Roses* traces the co-evolution of roses and human cultures. Now, Anna Pavord reaffirms some of the connections between art and ornamental plants in an excellent new book, *The Tulip*. She tells the story of tulips with a scholarly thoroughness unlikely to be rivaled anytime soon, and yet the book has the wit and charm of the very best garden writing. I feel that *The Tulip* is, quite simply, the best history of any single breeding complex ever published.

There are some 120 species of tulips, most of them native to central Asia. The first clear evidence of their presence in gardens comes from thirteenth-century Persian poems. Two centuries later, the Turks had glorious tulip gardens in Istanbul, and eventually gardeners there grew more than 1,000 named varieties. Connoisseurs favored extremely elongated petals that tapered to needle-like points, completely unlike the rounded, blocky flowers preferred today. The story of the tulip under cultivation is a story of aesthetic change, as the plant moved from Islamic to Christian civilization in the sixteenth century, and then from scholars’ gardens to those of aristocrats to the allotment gardens of the first plant breeders (who were known as florists). Each of these moves resulted in