

## **Making Noise (From Babel to the Big Bang & Beyond)**

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This is a BIG book, 912 pages, (not including the bibliography available via download from the publisher's site) but what may be interesting to any practitioner who deals with noise control is that the work contains exactly zero equations and only one multi-variable plot (the "sketch" of a sine wave on pp. 424 does not count). How could one dare addressing noise issues without these most valuable tools? How could one even write about the topic of noise in an intelligent fashion without a structured and quantitative approach based of a solid theoretical foundation and illustrated experimental results?

The answers to these questions are "*Hillel Schwartz superbly rises to the challenge. He writes about the topic of noise in a fashion that is informative, researched, and most of it enlightening. He took on a huge task and he did it very well.*"

The acknowledgements page "Consonance" written in the form of a poem "To all of those within hearing" sets a tone for the book that will be carried until the last page of the last chapter. Page after page, the author lead us on to a fascinating journey about noise, in a fashion that is totally enlightening yet relaxed. For example, *Chapter 1 (Everywhere)* deals with recognizing the presence of noise in every context of human life, and how the said presence has been extensively documented by art in any form and through language. The examples are plentiful and colorful —some may even find a few mildly offensive— and many are downright hilarious. *Chapter 2 ("Everywhen and Everyone")* illustrates how every person in every culture has been exposed to noise from the very first day of their existence and illustrates how one deals with the issues on a personal level.

*Chapter 3 ("Everyhow")* may be of special interest to an audience of scientists and engineers as it focuses on concepts associated with quantifying noise, starting

with the early work from all of the seminal figures in acoustics and ending with recent (2009) references. Although the word "decibel" does not appear until page 528 and the decibel symbol is actually shown as "db," (!) this is a great chapter supplemented by many interesting pictures and illustrations; the author calls them "soundplates" and the favorites of this reviewer are that of W.C. Sabine seated in his reverberation testing apparatus at Riverbank (pp. 456), and that of Harvey Fletcher's Loudness Spectrum Chart, which has been embellished by adding a drawing of a "Lesser Vampire Bat." As in the previous chapters the topic flows well and one just goes on to the next page for further information. It should be noted that the index is so good that there is no need to read the book in a sequential fashion.

The reader should not expect that ground-breaking revelations will be offered when it comes to quantitative assessment of noise, as the author is not interested in establishing a dichotomy between a quantitative review of noise (using defined metrics) and a qualitative perception that relies on less-measurable parameters rooted in cultural and individual factors. The book does not present a set of methods to quantify or qualify noise backed up in a review of science but it offers practitioners in the field with an often-forgotten perspective: history. This book is all about the assessment of noise in the global context of mankind throughout the ages, and Hillel Schwartz does such a wonderful work at documenting the past and relating it to the present that he offers us a solid perspective as to what noise may eventually mean to us in the future.

This book is a highly recommended addition to the library of those who care to be enlightened about a topic that is characterized by a fundamental dichotomy: Noise is an essential part of what describes us, yet we still define it as something that is unwanted.

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