

## **Hear Where We Are: Sound, Ecology, and Sense of Place**

Michael Stocker

Springer, New York, (2013), 200 pp., 29.00 USD, softbound, ISBN 978-1-4614-7284-1

It started off badly — a 1-1/2 page section “In Praise of Hear Where We Are.” Really, do we need to see this somewhere else beside the advertisements? Perhaps I should have started this review with: “This review is the finest I have ever read (name withheld upon request).”

The main purpose of this book is “to lead us back into a stronger appreciation of the world in which we live.” While quite optimistic and far-reaching, this book, for me at least, meets its purpose.

This densely written paperbound consists of five sections, each with about eight chapters of a few pages each.

1. Hear Here: The impact of sound on personal placement
2. The song of creation
3. What is this thing called “sound?”
4. Sound menagerie: other animals' sound perception
5. Communication: sound into form

Interspersed with illustrations and followed by 20 pages of notes is a section “About the Author” and an index.

As means of an introduction, the author discusses the effects of sound in our lives, the normal things like the sound of raindrops, of people you know entering the house, the quiet when you turn off your computer for the day, and so on. The sounds are intertwined with emotive feelings that they engender. But also sounds allow us to sense what we cannot see: things on the other sides of barriers and things happening in the dark. Sound, according to the author, allows us to gage size, shape, density of our surroundings and our place within it. Readers of this Journal know this, and the introduction, though, sets the stage for the more subjective and descriptive treatments to come.

### **1 HEAR HERE: THE IMPACT OF SOUND ON PERSONAL PLACEMENT**

This section is about how we (humans) are affected by sound. This is perhaps best enjoyed by those involved with personal perception of sounds, natural and person-made, triggering calm, fear, comfort, and so on. I cannot buy the author's concept of a great “array of silences,” but I guess this makes sense in

the psychoacoustics community. He does describe silences in terms of background environment and perhaps the psychological effects are different. Is it the silence? In the treatment of alarms the author states auditory signals will trigger reaction faster than visual ones, just one of the things I learned from this book.

### **2 THE SONG OF CREATION**

This section is more about the subjective responses to sounds and noise, much from the history of religious aspects. I found the discussion of “sound and warfare” most interesting. That war is more than death, destruction, and other forms of misery: it includes, as we see know (September 2014) the sounds of threats, of bellicose talk, and of intimidation, usually as a precursor to the mayhem but also during its conduct. “Our” superior cause, our superior weapons, and our expected victory always go along with the seemingly endless conflicts humans seem to use as a way to make their life better. Sound in war was used to intimidate enemies back during the “pipe and drum” era alerting enemy to advancing military to the use of exposure of extremely loud noise to torture prisoners by the US in Iraq.

Also discussed is the effects of sound on healing where author discusses how music and voice (speech and singing) are ways to help heal.

### **3 WHAT IS THIS THING CALLED “SOUND?”**

At last — here is the part of the more scientific treatment in the book. This is a good, but very elementary, treatment of sound. All readers of this Journal will know about this. But still, it is valuable — it discusses the information we could use to explain sound to laypersons. It reinforces that the real important concept, wavelength, not frequency, is the most important factor in the effects of sound on solid objects.

In this section physiological acoustics, hearing, effects of sound on the ear, etc. are discussed. This is a great material for those of us giving seminars to students, technicians, or if necessary, our spouses or partners. This is a wonderful, short treatment of the topic, and it makes the book worth buying.

### **4 SOUND MENAGERIE: OTHER ANIMALS' SOUND PERCEPTION**

As the title suggests, this is perfect for those in animal acoustics. Fish and marine mammals, whales and dolphins, and land-mammals, and flying creature's ears are discussed. The propagation of sound in the non-homogeneous, anisotropic ground is of concern to

rodents and other ground dwellers. Even insects are discussed.

## **5 COMMUNICATION: SOUND INTO FORM**

This last chapter deals with using sounds to send information. It includes transmission between humans, between insects, and between animals.

In summary, this is a readable and enjoyable book. It has not much noise control. It is descriptive more than analytic and is a nice compilation of topics with which

we in noise control engineering have less familiarity: human perception of sounds, soundscape studies, and psychological, physiological and animal acoustics.

This book is highly recommended. It is a steal at the price.

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