

Hearing one's calling in acoustics

Riding the Waves

A Life in Sound, Science, and Industry

Leo Beranek
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Reviewed by Carl Rosenberg

In *Riding the Waves: A Life in Sound, Science, and Industry*, Leo Beranek shares with readers his fascinating life. His delightfully entertaining and engaging memoir offers vignettes, observations, and insights that illuminate several threads of 20th-century science, art, and technology. He is a gifted and candid raconteur whose writing is intriguing, charming, and astute. He hopes readers can "relate to the roller-coaster swings—the successes and failures, joys and sorrows—that life throws our way," and curious and thoughtful readers interested in what lies behind the gloss of a luminary in science and engineering will enjoy the ride.

Beranek was born and raised on an Iowa farm more than 90 years ago. By dint of family values, innate intellect, hard work, and serendipity, he blossomed as a scientist. His primary focus has been in the field of acoustics, and he has authored or edited 12 books and more than 150 technical articles covering a wide range of topics, from controlling noise from jet aircrafts and in communities to designing concert halls. He is undoubtedly the most respected and referenced expert in architectural acoustics and noise control. His works are erudite and lucid; they form the backbone of professional study in engineering and architectural acoustics. But Beranek is also a polymath and has displayed business acumen, a commit-

ment to community, and leadership in his many endeavors. He was awarded the 2002 National Medal of Science "for his leadership, dedication, and contributions to the art and science of acoustics; for co-founding one of the world's foremost acoustical research and consulting firms; and for sustained contributions to scientific societies and civic organizations."

Guided by the book's 10 neatly arranged chapters, readers are led through Beranek's life, starting with his birth in Solon, Iowa, in 1914. They learn of his youth in a rural community, including his high-school years and brief stint as a drum player to earn money during the Great Depression. Readers follow his transition to college, the move east to study and work at Harvard University where he concentrated in electronics and acoustics and collaborated with legendary colleagues and mentors such as Frederick Hunt and Philip Morse. Beranek shares the excitement of wartime projects through the eyes of a talented 26-year-old engineer.

Subsequent chapters cover his research work at MIT and his founding of the company Bolt, Beranek and Newman (now BBN Technologies) in 1948 with Richard Bolt and Bolt's former graduate student Robert Newman. The author discusses his groundbreaking consulting work for the Port Authority of New York, which is one of the more suspenseful and entertaining episodes in the book; the saga of finance and politics in wrestling with the Federal Communications Commission for a television station license in Boston; and the growth of computer sciences, in which BBN Technologies played a significant role. Beranek relates his side of the painful story about flaws in the design of Philharmonic Hall at Lincoln Center, which opened in 1962; he acknowledges the problems as a result of miscommunication, politics, and unrealistic expectations. One of that chapter's subhead-

ings, "A Vendetta, on the Heels of a Misunderstanding," would surely pique anyone's interest, and one would never find such insights in any textbook.

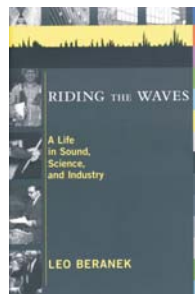
Beranek fondly describes what he was doing when the Boston Red Sox lost the 1946 World Series, the joys and challenges he found on the ski slopes, his first car, the loves of his life, and the growth of his family. He writes about

his outstanding public service, such as his leadership endeavors at the Acoustical Society of America, the American Academy of Arts and Sciences, and the Boston Symphony Orchestra. And he tells the tale of how he redeemed his reputation with a new concert hall design in Tokyo. His writing style is clear and direct as he recounts all his experiences,

and his infectious spirit and warm grin shine through. In fact, in almost all of the two dozen or so photos in the book, Beranek is smiling.

Admittedly, the book is not an objective history but a personal—even biased—memoir; others familiar with the same events may have quite different and contrary interpretations. And Beranek does not try either to place the events of his 70-year career in a broader historical or societal context or to provide an overarching philosophical or intellectual analysis or framework. But it is an autobiography, and it gives us a view of Beranek's life that no one else can share. That fact is undoubtedly the book's greatest strength, not at all a criticism.

Riding the Waves is a fascinating and delightful adventure story. As a good memoir should do, it encourages readers to think about their own experiences and contributions in life as they learn about those of the writer. In closing his book, Beranek writes, "What I cherish the most, and what I would most like to be remembered for, are the human connections I made in everything I've done." His memoir expands those connections to new, fortunate readers.



Carl Rosenberg is a supervisory consultant at Acentech, the successor to Bolt, Beranek and Newman since 1991. The company specializes in architectural acoustics, systems design, and environmental technologies.