Deaf Architects & Blind Acousticians?

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Preface

Like many of my colleagues who have chosen to study acoustics, I combined my interests in science, majoring in Physics at Tufts University, with my non-professional passion, music. I sang with the Tufts chorus and ended

up doing a thesis on the acoustics of Tuft's Cohen Auditorium-at that time an acoustical disaster. Although I concentrated on ultrasonics and materials science in my graduate work at Harvard, my Ph.D. advisor provided an excellent course on the fundamentals of architectural acoustics, complementing a more practical course at MIT that I audited as a senior at Tufts. That course was taught by Robert Newman, a founder of one of the first large acoustical consulting firms, Bolt, Beranek and Newman, Inc. (BBN) I worked during the semester after my first year of graduate work at BBN on a problem of noise control in the Apollo Command Module. During those graduate school years, and after I arrived at Yale as an assistant professor in the Department of Engineering and Applied Science, I occasionally consulted in architectural and environmental acoustics, and beginning in the early 70's I began teaching a course in architectural acoustics in the Yale School of Architecture. That course evolved from a full semester elective, mostly taken by the technically directed students in the School of Drams, to a required one-month, short course in the Environmental Controls sequence taught by Professor Everett Barber. He, like I, spent nearly two decades learning to adapt our technical courses to the very special mindset found in many students of architecture. It has been a sometimes frustrating, but mostly rewarding, learning experience.

Deaf Architects and Blind Acousticians? A guide to the Principles of Sound Design (a.k.a. DABA) tried to be little more than a starting point for architects and future architects, acousticians, and planners, as well as any individual who wants to go beyond and appreciation of the subject to a working knowledge of nomenclature and quantitative issues in the acoustics of architectural spaces.

I do not practice architectural acoustics on a regular basis. I occasionally consult, especially with new and renovated spaces at Yale, and have been involved intensely in one large arts center project. But I am a student of architectural acoustics and have spent a score of years studying the pedagogy of instruction in architectural acoustics.

I owe much to many practicing experts in the field, some who have contributed to the several case studies that punctuate the story I try to tell in DABA Leo Beranek, one of the original heroes in this field, has graciously provided input to the discussion of the important learning experience of New York's Philharmonic Hall (now Avery Fisher), and has given permission for the graphic material used in the case study on Kresge Hall. Carl Rosenblum and the Acoustical Society of America are also acknowledged for their important input on this section. Chris Jaffe of Jaffe Holden Scarbrough Acoustics, my friend from Connecticut, has demonstrated in the case study (Sala de Conciertos Nezahualcoyoty1) and in other spaces that one can go beyond the shoe box hall and produce a superb result. David Klepper properly chided me for not introducing sound reinforcement systems adequately in an early draft of DABA, and took the bait in providing the source materials for that section, as well as the case study on Sweeney Chapel. My fellow Yale colleague, George Izenour, has demonstrated by his extraordinary record of practice in theatre design and by his magnificent tome of the same title, he and McGraw-Hill have given permission to use the graphical representation of the variable acoustics of Jones Hall, Houston, Texas. I also acknowledge Progressive Architecture’s permission to use figures and some text from their article on the Conard High School Music Department, West Hartford, CT.

Over the years I have greatly benefited from the many informal conversations on architectural acoustics from my friends in the field. A special note of thanks to Bill Cavanaugh whom I've known since 1965 when he has at BBN, and, Bob Essert, who studied acoustics with me, before joining Artec (headed by Russell Johnson, another Yalie), and then moving to Arup Acoustics Boston House in London. Mr. David Egan's book Architectural Acoustics, (McGraw-Hill) has been a wonderful source of information, which I suggest my students purchase if they want to get more deeply into the topic than my primer goes.

Finally, I thank my wife, Nancy, who knows me best and who has helped me understand the most important acoustical principle: One cannot hear if one does not listen.

Start by marking â€œDeaf Architects and Blind Acousticians? A Guide to the Principles of Sound Designâ€ as Want to Read: Want to Read savingâ€¦Â An introduction to the subject of architectural acoustics, directed at students of architecture, science, and engineering, and to architects and planners. It is based on a short course that the author teaches at Yale University's Graduate School of Architecture. It is written in a friendly manner, making technical information palatable. Room acoustics modeling using the ray-tracing method: implementation and evaluation. Licentiate Thesis University of Turku Department of Physics. 2005 David Oliva Elorza. 2. 3. A mi abuelo. 4. Abstract.Â 7 R. E. Apfel. Deaf architects and blind acousticians?. A guide to the principles of sound design. Apple Enterprises Press. 1998. 8 L. Cremer, H. A. MÃ¼ller. Principles and applications of room acoustics. Volume 1. Applied Science Publishers. I recommend "Deaf Architects & Blind Acousticians? A guide to the Principles of Sound Design" by Robert E. Apfel. I'm an acoustical consultant who works with architects. I've been told many times that acoustics is not important, only to be called in to fix a problem after the space is occupied. Jul 7, 08 3:14 pm Â·. Â· Block this user. Are you sure you want to block this user and hide all related comments throughout the site?