

Concert and Opera Halls

Concert and Opera Halls: How They Sound

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The author compares the acoustical attributes of 76 halls in 22 countries around the world. In the first five chapters, the effects of a hall's acoustics on composition, performance and listening are examined in detail. Chapter six, over one half of the book, describes the 76 halls which are presented complete with photographs and drawings, all to the same scale. The halls are rank-ordered into five categories of acoustical quality, and ranked on the basis of interviews with conductors and music critics, and cross-checked with written questionnaires mailed to a different set of performers and critics.

In chapters 7 through 15, the different acoustical attributes and their relation to the 76 halls are presented. Special attention is given to the six accepted parameters for evaluating a hall's acoustical quality: liveness, warmth, loudness, spaciousness, intimacy and listener envelopment. The last two chapters are directed to architects and detail the factors that must be considered, in sequence, during the design of a music hall. The use of computer modeling and scale models as part of the design process is treated at length.

In an appendix, the results of modern acoustical measurements on the halls are tabulated. A study of these data is essential if the acoustician is to understand why some halls are rated better acoustically than others. The book is written for acousticians and architects, as well as musicians, music critics, hall and concert managers, and lovers of fine music.