

Acoustical Design of Theatres for Drama Performance: 1985—2010

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Preface

This book is the latest edition in a series of poster books published by the Acoustical Society of America (ASA). The previous book in the series, which served as a major inspiration for the current publication, is *Halls for Music Performance: Another Two Decades of Experience, 1982–2002*, published in 2003 and co-edited by Ian Hoffman, Christopher Storch, and Timothy Foulkes. The current book is the second in the series that covers drama theaters. The first theatre book, *Theatres for Drama Performance: Recent Experiences in Acoustical Design*, was published in 1986 and edited by Richard Talaske and Richard Boner. The music halls book and the current theatre book were both based on poster sessions sponsored by the ASA Technical Committee on Architectural Acoustics. The poster session for the current book, titled *Theatres for Drama Performance: Another Two Decades (1984–2004)*, was co-chaired by Gregory Miller and Robin Glosemeyer Petrone at the Spring 2004 ASA meeting in New York City. Many of the theatre submissions in this book were part of the New York session. The time frame has now been expanded to include theatres designed through 2010, so submissions not originally part of the 2004 special session have also been included in this book.

The primary purpose of this book is to serve as a reference for acoustical designers and consultants, students studying architectural acoustics, theatre planners, and architects. Twenty-eight acoustical consulting firms have contributed 130 theatres from eight countries across the globe. Each theatre is presented as a full-color two-page spread, which includes a short narrative by the consultant, pictures and drawings of the space, and predicted or measured acoustical data.

There is a rich diversity of theatres covered in this book, ranging from highly flexible black box spaces to formal proscenium theatres. The book has been sub-divided into sections to capture four major categories: Proscenium, Thrust, Black Box/Multi-Form, and Alternative Forms. The majority of the theatres included fall into the first category—Proscenium, a type of theatre in which the audience directly faces the stage, which is framed by a large archway known as the proscenium arch. Behind the arch is typically a tall stagehouse that stores scenery, sets, and special effects equipment. The second category, Thrust, features theatres that have a stage area that “thrusts” or extends out into the audience area, with the audience seating surrounding the stage on three sides, allowing for a shorter distance between the performers and the spectators. Some of the theatres in this category also include a proscenium and stagehouse as well. The third category, Black Box/Multi-Form, contains theatres that are flexible spaces that can be completely transformed between one performance and the next, depending on the specific performance requirements. In these spaces it is often possible for the stage area to be set up in the center of the space, with the audience surrounding it on all four sides. The space could also be set up in a more traditional setting, with a stage at one end and the audience facing the stage directly along one side only. The remaining theatres are not easily described by the first three classifications and have been placed in the Alternative Form category. Theatres in this section range from a full arena-style theatre to multi-form proscenium-type theatres.

The first ASA drama theatres book highlighted designs through 1985 whereas the current books cover the period from 1985–2010. Major changes in theatre design have taken place in the last 25 years, and Robert Long of Theatre Consultants Collaborative highlights this development in the following introduction section. The contributed theatres reflect these changes and the creative solutions that have been utilized to overcome some of the many challenges associated with theatre design.

Although acoustical consultants offer prefer that acoustics be given top priority when designing a theatre, other elements must be considered as well. The architecture, sight lines, accessibility, and theatrical lighting, to name a few, all play important roles in contributing to the overall drama theatre experience. In the second section of the introduction, Robert Campbell of Fisher Dachs Associates discusses achieving a balance between the three core areas of acoustics, theatre planning, and architecture.

The final section of the introduction was inspired by the special session titled *Acoustics and Theatre Consulting: A Special Relationship*, co-sponsored by the ASA Technical Committee on Architectural Acoustics, Musical Acoustics, and Noise, chaired by Scott Pfeiffer of Threshold Acoustics, LLC at the fall 2009 ASA meeting in San Antonio, Texas. In this section of the introduction, Todd Hensley of Schuler Shook Theatre Planners, provides an in-depth look at the working relationship between acoustical consultants and theatre planners and offers advice for a successful partnership.

Following the introduction is a case study written by Howard Shalwitz, Artistic Director of the Woolly Mammoth Theatre company, a theatre included in this publication. This case study explores the design and construction of the Woolly Mammoth Theatre from the point of view of the artistic director.

For readers who desire more background information on architectural acoustics, as specifically related to theatre design, key terms are explained and a general summary of the design process is provided in the acoustical design overview and glossary in the appendices at the end of the book.

We are grateful to the many people who have helped this book come to fruition. In particular, we appreciate the work of the acoustical consultants whose firms' designs are featured in this publication. Their assistance was essential in compiling the necessary elements for each theatre contribution, and they should be credited with much of this book's success. We'd also like to thank Gregory Miller and Robin Glosemeyer Petrone for initiating the poster session and for laying the foundation for the publication. We appreciate our mentors and colleagues in the world of acoustics who provided guidance throughout this process, including Bill Cavanaugh, Ian Hoffman, Lily Wang, and members of the Acoustical Society of America Books+ Committee. Much of the labor involved with organizing the assets of this book and communicating with contributors was carried out by Vassar College undergraduate students, Laura Livingston and Jonathan Seclow, and we are very thankful for their assistance.

The process of creating this publication has been rewarding and challenging, and we hope readers will find it to be a useful reference and valuable for many years to come, or at least until the next edition is published in 25 years... .

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