PRACTICAL PROJECTS FOR TEACHING LIGHTING DESIGN

A COMPENDIUM
VOLUME 2

A Project of the USITT Lighting Design & Technology Commission

2016

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The authors, publisher, and editors have used their best efforts to present standard and safe information in this book, and warrant that to the best of our ability there is no advice given herein which will result in injury.

The reader is urged to always use the utmost caution when working with electricity, suspended fixtures, and lighting equipment.[1]

FOREWORD

ORIGIN

The first edition of Practical Projects for Teaching Lighting Design: A Compendium, was published in 1990 by USITT. It was the result of two years of national surveys interspersed between three years of panel presentations and discussion groups at the national conferences in Oakland, CA (1986), Minneapolis, MN (1987) and Anaheim, CA (1988). During an era that *pre-dated email*, the submission and accumulation of projects was somewhat slow and, at times laborious, but the work was ultimately completed and the inaugural publication was printed.

Through the dedication, insight, and hard work of Professor Rich Dunham and with the continued support of the Lighting Commission, the Second Edition was published in 1999. That edition included revisions and improvements in content, format, and presentation, among other attributes. Both the Costume and Scenic Design Commissions went on to publish their own versions of compendia, both of which are in their second volume.

Nationwide solicitation for projects to be included in Volume 2 began in 2010 with project submissions being sent to Geneva Wynn (then editor) and other members of the Lighting Commission. In 2014, the Commission formulated a new Compendium Editing Committee comprised of Bruce Auerbach, Anne E. McMills, and Todd Studebaker. It was this committee that led to the gathering, organizing, and editing of projects for Volume 2.

The committee solicited projects from lighting educators/designers from throughout the country, including the USITT membership. Early on in the process it was determined that projects from the previous editions would only be included if they were significantly revised, thus, Volume 2 was created with ostensibly new works. All told, over forty projects were submitted for consideration.

ORGANIZATION

Volume 2 has been organized under the following six general topics or categories: Research, Observation, and Communication; Visualization; Drafting and Technical; Color; Cueing; and Light Lab. The Committee acknowledges that any one of these topics may apply to more than one project, but we likewise agree that there is ample variety of opinion and methodology in lighting education to allow the end user to mix and match the projects to best suit his or her specific needs.

In addition, within each category the projects are organized roughly by degree of difficulty – beginning through advanced/graduate. Also, the appendices contain projects relating to the creation of useful teaching tools for lighting education.

FEATURES OF VOLUME 2

As alluded to earlier, Volume 2 is a unique publication and does not include projects from previous editions. That said, it is clear that projects from this volume may bear some resemblance to work published earlier. For example, it seems obvious that we continue to include the study of principles of color, even if new projects somewhat resemble old.

Projects in Volume 1 were selected and discussed in a committee format, and were further edited for content, organization, and structure by the Compendium editors of the respective editions. The Volume 2 *blind jury evaluation process* consisted of a list of qualified lighting educators assembled by the Editing Committee in consultation with members of the Lighting Commission. From that list, juries were created to help ensure an unbiased, critical, insightful evaluation of all work being considered for publication. *Absolutely no projects are included in Volume 2 that did not go through a formal vetting process by the fully qualified juries.* Respondents offered numerous suggestions for changes in areas including: project goals and objectives, grading procedure, degree of difficulty, most appropriate category, quality of photos and drawings, along with any additional comments they deemed appropriate. Ultimately, each juror was asked whether or not the project should be included in the final publication.

Some projects were returned to their original authors with suggestions for clarification and changes. The authors were entitled to agree or disagree with the recommendations then return their work for further review. Ultimately all projects were then reviewed by the Committee and, in some cases, additional editing took place.

FUTURE VOLUMES

The one constant in lighting pedagogy is that it is always subject to change. The original concept for this compendium of projects now spans an entire generation of lighting technicians and artists. Its genesis dates back to a period when auto-transformer dimmers were still in use. Students who were instructed from the first editions have gone on to become successful faculty and designers, and many have used the Compendium in their own classrooms along the way. Some of the contributors to the first edition have gone from entry-level faculty to tenured full professors and department heads nearing retirement. And, sadly, there are some early contributors who have passed on.

Our future as designers, technicians, and educators lies in the ongoing commitment to innovation in the instruction of lighting design and theatre arts in general. It is with that future in mind that you are asked to look for new projects and methodologies for the teaching of stage lighting. You are invited to submit ideas for projects to be included in a future volume. You may correspond directly with the Lighting Design and Technology Commission. While there is no firm date established for the next edition/volume, your dedication and enthusiasm for that future work is the foundation on which the next publication will be based. Please contribute where and how you can.

[1] Practical Projects for Teaching Lighting Design: A Compendium (Volume 1)

[2] This section heavily influenced by Practical Projects for Teaching Lighting Design: A Compendium, (Volume 1)

ACKNOWLEDGMENTS

This volume of the Compendium would not have been possible without the contributions from the following individuals:

COMMITTEE MEMBERS:

- Bruce Auerbach, co-chair and co-editor
- Anne E. McMills, co-chair and co-editor
- Todd Studebaker, committee member

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...and the generous support and guidance from USITT and the Lighting Design and Technology Commission.
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TEACHING TOOLS

Monochromatic Color Exploration

17

Anthony Pellecchia
University of Memphis

OVERALL PROJECT GOAL

To explore monochromatic color lighting schemes.

LEARNING OBJECTIVES

1. To recognize the importance of color experimentation and testing.
2. To explore how individual elements within a scene react to monochromatic colors of light.
3. To describe how color changes mood, surfaces, and viewer reaction.
4. To develop color communication skills beyond use of hue and transmission.
5. To examine the result of swapping color locations on a scene.

INTENDED AUDIENCE LEVEL

_x_ Beginning ___ Intermediate ___ Advanced/Graduate

PROJECT DESCRIPTION

The exploration and understanding of color as a design tool for creating appropriate lighting designs plays a significant part in developing a lighting designer's knowledge. Emerging designers often have limited opportunity to expand their vocabulary and communication skills with regard to anything beyond hue and transmission. Design students need practical exposure to concepts of color theory to gain a better grasp of how to use and experiment with color as a design tool. This project provides students with the opportunity to choose and apply monochromatic colors to a simple scene. The students will develop and apply new communication skills with regard to how color affects mood, temperature (warm or cold), aesthetic, dramatic impact, and modification of clothing and scenery.

PROCEDURE

1. Assign student (or team of students) a random color e.g. red, blue, green, orange, yellow, purple, amber, violet, etc.
2. Give each student or team 5 to 10 minutes to explore color storage and pull three different color cuts that correspond to their assigned hue that they feel is appropriate for key, fill and backdrop wash. (See Figures 17.1-17.7.)
3. On stage or in the lab, the first student places his/her selected colors in the three fixtures.
4. All students write down initial thoughts and impressions of the scene.
5. After initial viewing, the student who is presenting discusses thoughts about how the scene has been modified.

6. Open discussion of how the monochromatic scheme affects the mood, temperature (warm or cold), dramatic impact, color modification of clothing and scenery, aesthetic, and possible performance application.
7. The student rearranges the colors based on personal observation and class discussion.
8. The student discusses how and why the scene has changed.
9. Repeat the process with the other students or teams.

REQUIREMENTS

Space

A light lab or theatre space with accessible fixture locations

Equipment/Materials

Solid Backdrop, mannequin or figure, furniture: chair, table, and simple set dressing. Three different lighting locations with a fixture hung in a key, fill, and backdrop wash position respectively. Control all variables other than color i.e. intensity, lamp wattage, quality, etc. Prior to the class period, the professor sets up the scenery, hangs, and focuses the fixtures in order to allow sufficient time to explore monochromatic color applications in class.

WORK COMPLETED

_x_ In-class ___ Out-of-class

If in-class, how much time is allotted for individual project set-up: 5 to 10 minutes of color prep.

METHOD OF ASSESSMENT

The purpose of the exploration is to provide a hands-on learning experience with color in a lab setting. The project allows students to develop a stronger understanding of the impact of color as well as strengthen their visual and communication skills regarding color choices. Students are required to fill out a scene analysis and write down thoughts and reactions to each monochromatic color scheme using terms such as saturation, value, chroma, visibility, highlight, mood, realistic, non-realistic, warm, cold, etc. The forms can be collected and reviewed by the professor to provide feedback and a grade.

COMMENTS

The entire project can be adapted to work with white or color models in a smaller setting using 3" Inky Fresnels or PAR 16s. The students are genuinely intrigued with the ability to apply monochromatic color schemes to performance. Students develop the understanding that even within a monochromatic color scheme, a color can read as a "white" anchor providing focus for the viewer. Students also realize that there is a significant range and variety in a particular hue that can lead to surprising color design choices. This project opens avenues of discussion regarding color correction and the impact of subtle color choices in a scene. With large groups of students, this project can sometimes carry over into a second day of class.

(17.1) NO COLOR

Photo by: Raimondo Genna

(17.2) AMBER (KEY: R02, FILL: R05, BACKGROUND WASH: R09)

Photo by: Raimondo Genna

(17.3) PINK (KEY: R33, FILL: R35, BACKGROUND WASH: R37)

Photo by: Raimondo Genna

(17.4) PURPLE (KEY: R54, FILL: R52, BACKGROUND WASH: R56)

Photo by: Raimondo Genna

(17.5) BLUE (KEY: R60, FILL: R64, BACKGROUND WASH: R68)

Photo by: Raimondo Genna

(17.6) GREEN (KEY: R87, FILL: R389, BACKGROUND WASH: R93)

Photo by: Raimondo Genna

(17.7) RED (KEY: R50, FILL: R26, BACKGROUND WASH: R27)

Photo by: Raimondo Genna