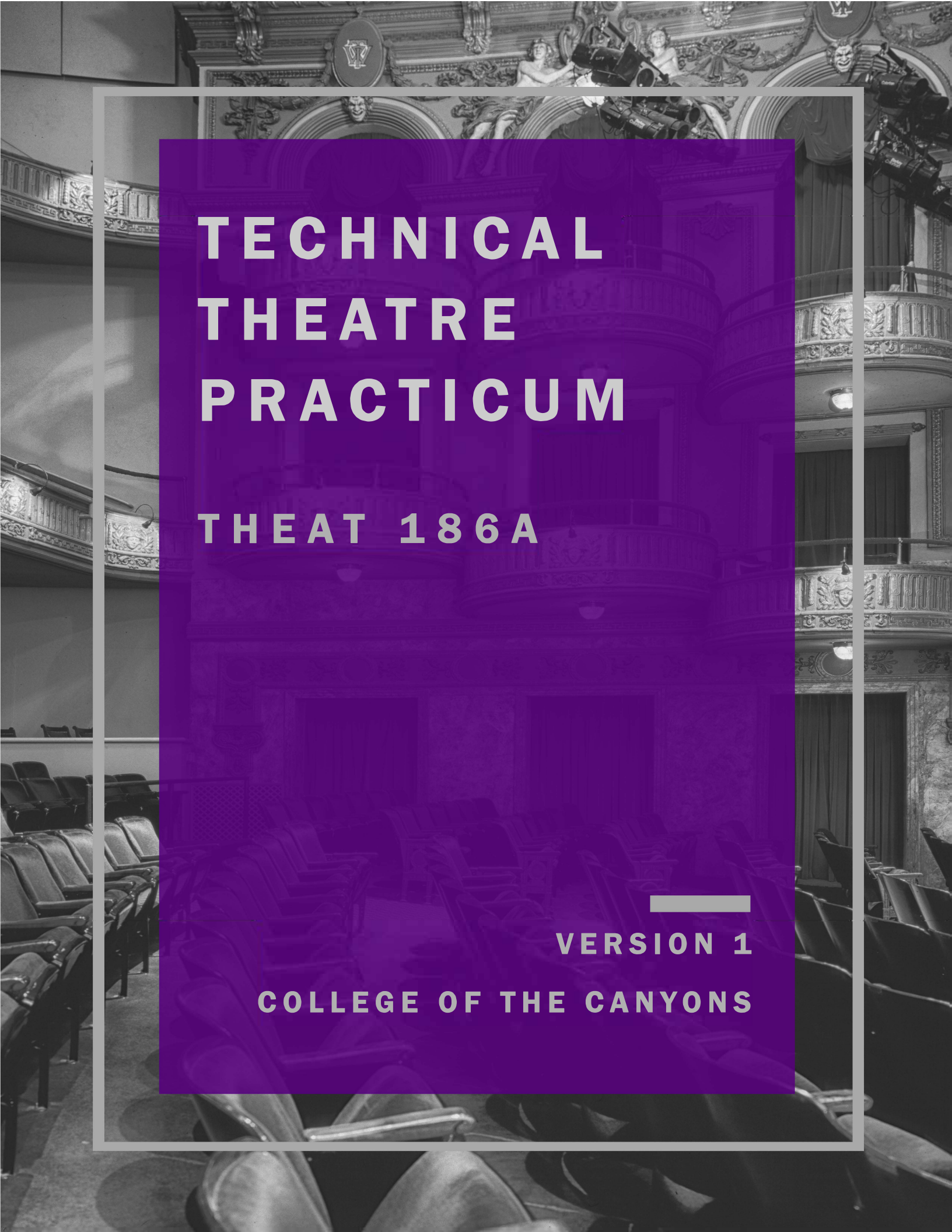

TECHNICAL THEATRE PRACTICUM

THEAT 186A

VERSION 1

COLLEGE OF THE CANYONS

186 A: TECHNICAL THEATRE PRACTICUM TEXTBOOK

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CHAPTER 1: Jobs in Technical Theatre

Introduction

Welcome to the exciting world of technical theatre. Studying this topic can lead to many different careers in several different sectors of the economy. The general skills needed for any of the careers or sectors have many things in common. Workers need to be dead-line oriented, as most productions have firm timelines that cannot be altered. Critical thinking and analysis are much needed skills. Almost every project in the field is unique and technicians and designers alike must discover the best way of reaching a project's goal. Creative problem solving is trait successful practitioners have in common. With every project being unique, there are no guaranteed solutions to the problems that are presented. Technicians draw on their vast experience of what worked in the past that can be adapted to be a solution to the current problems. Clear communication and collaboration round out the necessary skills. No technical theatre project is ever handled by one person on their own. Collaboration with many people is the norm, and successful collaboration requires clear written and verbal communication skills.

Industry Sectors

Most people immediately associate Technical Theatre with theatre, but the training is used in other sectors as well. Opera, and Ballet companies run in much the same way (at least behind the scenes) as traditional theatre companies and hire similarly skilled personnel. Film and Television production companies also use people with the same skills. In fact, most collegiate film and television programs do not teach anything about the construction of scenery, props and costumes, instead leaving that education to their respective theatre departments. Themed entertainment, including theme parks and themed experiences, typically hire technicians from the world of technical theatre. Some of these skills also directly translate to hotel and convention centers and other special event companies. Lastly, many of the people who provide services for technical theatre, such as companies that develop, manufacture, repair, and sell technology for these industries hire employees with training in technical theatre.

Jobs

There are many jobs and job titles that fall under the category of technical theatre. Here are a list of some of them and what they do.

- Designer: Designs various elements for a production, such as Scenery, Costumes, Lighting, Sound, and Projections. They analyze a script, collaborate with a director and find the best way to express the elements of the production. Most have at least a Bachelor's degree, and many have a Master's degree.
    - Assistant Designers: Assistant designers may be a general assistant to a designer finalizing designs or keeping them up-to-date as production needs change. They may also have specialized skills that the designer does not have. Assistant designers may be attached to a specific designer, or to a specific venue. Some people see an assistant position as a training ground to becoming a designer, while others make a career out of being an assistant.

- Property Master: In charge of building and buying all the props needed for a show (See Chapter 6). Property masters oversee the props crew who maintain the props during a production and make sure all the items are placed properly before a show and put away properly at the end of the night. Many props people have an extensive knowledge of periods and styles of furniture and decoration
- Technical Director: Technical Directors oversee all of the technical elements on a show. They often specialize in scenic construction and rigging. Depending on the production, they may also oversee the master calendar, coordinating when technical items will be moved from the shops where they are constructed into the theatre, and the overall budget for the technical elements of the show. They are concerned with the safety of all the performers and technicians working on a show. Many Technical Directors have a Bachelor's Degree or Master's Degree
    - Assistant Technical Director: There are many different sets of responsibilities that can fall under this job title. Often Assistant Technical director's focus on one or more specific aspects of the many duties that a Technical Director Preforms.
- Production Manager: Oversees the budget and the scheduling of the technical elements of a show. Especially if a show tours, or needs to move technical elements long distances, the production manager will manage the logistics of this work. They often coordinate the work of those on the production with outside entities that are collaborating on the production.
- Programmer: Most shows today have one or more systems run by computers. Lighting, sound, projection, and show control often have make extensive use of specialized computer hardware and software to execute the design. Programmers are experts in particular hardware and software and help execute the designer's vision within the software and hardware specified by the production.
- Master Carpenter: The title can refer to two different positions. In a scene shop, the master carpenter will work with the technical director to determine the best way to build the scenery, and then oversee the carpenters' construction process. They may also be responsible for ordering building materials. Backstage on a show, the head crew person may also be referred to as a master carpenter. In this case, they oversee the stage crew with the execution of moving scenery as needed for a production.
    - Shop Carpenters build scenery under the master carpenters direction
    - Stage Carpenters move scenery under the direction of the master carpenter.
- Master Electrician: A Master Electrician will coordinate with the lighting designer to develop the purchase and rental orders for a production, prepare all the gear for installation, and oversee the installation.
    - Electricians: Under the direction of the Master Electrician, the electricians will install, focus, and maintain all of the lighting (including projections) and water effects on the show. In some theatres they will also install the sound.
    - Follow Spot Operators: Spot Ops. are specialized electricians who constantly move a follow spot so that it maintains its focus on a specific performer.

- Stage Manager: The stage manager is the key conduit for information for a show during the rehearsal process. They are in rehearsals with the actors and the director. They create a report that passes on key information between the rehearsal room, the designers and various construction teams. Once the show moves into performance, they will "call" all the cues, and maintain the director's and designers' vision throughout the run.
    - Assistant Stage Managers: On larger shows, the Stage Manager will often have a team of assistants who will specialize in parts of the show (specific technical areas, Stage Left, Stage Right, etc. as needed by the stage manager).
- First Hand/Cutter/Draper/Stitcher: Crew members with these titles work in the costume shop executing the costume designs.
    - Costume Crafts: A costume crafts specialist creates the costume props for a show, such as hats, canes, purses etc.
- Wardrobe: Oversees the costumes on a production, making sure that they are kept in good repair and cleaned on the correct schedule
    - Dresser: Under the supervision of the Head of Wardrobe, assists specific actors with dressing, especially in quick changes (See Chapter 8)

There are many other jobs that can be found on various productions. As every technical theatre event is unique the size and makeup of the staff will also be unique.

Educational Paths

As intelligent readers can see from the above short list, there are many jobs in the field. Most educational programs at the Associate's Degree and Bachelor's Degree level offer a general introduction to the work. Some may allow a certain degree of specialization: Design, Electrics & Sound, Costumes, Carpentry/Technical Direction, and Stage Management. Most programs will require students to take a broad range of classes. Students in these areas will hone their skills in specific areas by focusing on them on school productions, and internships or work experiences. Many technicians have a surprising educational and career path that led them to their current work. If the opportunity presents itself, students should talk to working professionals and ask them how they got to where they are in the industry. Students will also need to seek out opportunities to learn "on the job," by working on as many shows and projects as they can. It is especially helpful to find ways to work with local industry leaders in the areas in which a student wishes to specialize.

In almost all sectors of the industry, there are highly successful people with very little in the way of formal education. In general, these people took a long path by working their way up from the bottom going through every job possible on their way to their current position. Students will also find many people with Bachelor's and Master's Degrees. Often the Master's Degree is required to work in educational environments. The additional education that comes with Bachelor's and Master's Degrees often represents an in-depth study of the theory behind the practical skills that can be learned on the job. The additional degree also helps people move more quickly toward their desired position in the world of technical theatre.

Additional Materials

- "Theatre Jobs Require Much More than What Meets the Eye"

- "Examining the responsibilities of stage managers and production stage managers."

CHAPTER 2: Working in a New Venue

Venues Defined

A venue, simply put, is the place where the play, event, etc. will be presented to the audience. Generally, a play, musical, opera, or ballet will be presented in a building specifically built to accommodate such a performance: a theatre. However, almost any place can be a venue. I have worked on theatre and dance productions in warehouses, hotel ballrooms, night clubs and even outside in a park. Even when working in a traditional theatre, there can be great variation in the space and restrictions between different theatres.

Most venues that regularly have performance in them have a standard set of drawings, and a book of useful information. In the old days, these drawing and books were copied and mailed to the production team in advance of a show. Today, many theatres have these documents on line in a .pdf form so that they can be downloaded by anyone.

Even if you are able to download exceedingly detailed information about the venue, nothing beats visiting it in person. Key production personnel, including designers, directors, and production team heads should try to visit the venue in person. The section of this chapter called "non-traditional venues" details the key information the site visit should gather.

Technical Information

In the "Additional Materials" at the end of the chapter you will find links to some websites containing the typical information for a venue. Let's take a look at what you can expect to find.

Drawings

There are several technical drawings that any venue will have. The first is the ground plan. This is a view of the theatre looking down. Often it will only be of the stage space, but some venues will have more complete drawings. The drawing will be in scale, meaning that a specific measurement in the drawing directly translates to a measurement in the real world.

A second essential drawing is a center line section. This is a drawing from the side that shows everything from the middle of the theatre (called the center line) to the outside wall. This drawing will also be in scale. Between the plan and the section, many people can have a pretty good idea of the size and shape of the theatre and the location of much of the technical equipment.

Many theatres today will also have computer files that contain a scale three-dimensional representation of the theatre. These are called CAD files. (CAD is short for Computer Aided Drafting.) There are two primary software packages used to read these files: AutoCAD (made by AutoDesk) and VectorWorks (made by Nemetschek). Even if you do not own the software to edit the files, both companies make free down-loadable viewers that allow you to read the information in the file.

Technical Package

Alongside the drawings, a theatre will upload a Technical Package, sometimes called a rider. This document will contain important information such as:

- Contact information for key venue staff
- Detailed measurements of critical parts of the theatre
- Inventories of existing equipment
- Rules and regulations of the venue

The Technical Package may also include helpful information such as parking (and rates), rental rates for the venue, local places to get food etc. These are often "living documents" that are updated on a fairly regular basis. Even if you have long experience with a particular venue, it is a good idea to review their current tech package on a regular basis. I recently had the experience of working with a theatre where I have worked annually for about four years. Assuming, that not much had changed between the previous year's production and this one, I prepared and submitted my materials. Only then did I learn that the theatre had made a major purchase of new lighting equipment which meant our production did not need to rent as much equipment as we had in previous years. The important lesson is to regularly review all the technical specifications for any venue you are working in.

Non-Traditional Venues

If the production you are working on is happening somewhere other than a theatre, it is called a non-traditional venue. Sometimes, this non-traditional venue will have a technical package and drawings. This may be the case if it is a hotel ballroom or convention center. It is, unfortunately, more likely that the venue will not have any of the information the production needs. Even when a technical package is available, they are often not as accurate or detailed as one would expect from a theatre. For example, I once designed lighting for a musical in a hotel ballroom. At the site visit, the entire design team learned that the wall that was to be the back of our set was completely covered with mirrors. The mirrors were not indicated on the drawing, and we had to develop a plan to deal with the unexpected reflections (in the end we flipped which side of the room would have the audience and which side would accommodate the stage).

The first thing to look for in a non-traditional space is how all the technical equipment is going to get into the room. It is important to take detailed measurements of the smallest door the equipment must fit through, and the tightest turn it has to make. Also make note if it is level or has ramps the whole way, if gear must be carried up stairs, or moved through elevators. The next theme for the team to determine is what space will be used for the audience, what space for the performance, and what space for "back stage." The back stage area will have to accommodate any scenery that must move on and off stage, as well as providing a place for the performers (and crew) to be when not on stage. Lastly, it is important to consider where the cast will change costumes for the show. While the team is figuring all of this out, it is a good idea to make a sketch of the room and take detailed measurements so an accurate plan and section can be generated later.

Another major consideration will be power. Technical theatre generally uses a lot of power, and has very strict requirements. Often, the lighting system and the sound system cannot share power. Even more common is learning that the venue does not have enough power to support even one of the systems. My general assumption, until the venue informs me otherwise, is that all the outlets I find in the room are connected to a single 15-amp breaker. Venues may have a disconnect box where the production can tie directly into the breaker panel giving them more power. Usually there is a fee to use this, and the tie-in must be done by venue staff. Even if the venue will allow the production to do the tie-in themselves, it is important that the production use a trained and qualified electrician do to this work. If this isn't an option, the production may have to rent a generator. A generator is a device that is often gas powered that generates electricity. They are often noisy, smelly and unattractive. If a generator needs to be used, the venue probably has strict rules about where it can be and what hours it can be run.

The team will have to determine what equipment is needed. If the venue doesn't own it, the equipment will have to be acquired elsewhere and brought in. This often includes:

- All lighting equipment (including lights, dimmers, and control)
- All sound equipment (Microphones, speakers, and mixing)
- Appropriate cable for the above two items
- Risers to create a stage
- Tables to support the technical equipment
- All the seating for the audience (and risers if needed)
- And drapes to create a "stage" space (and often pipes and bases to support them)

One of the biggest challenges of the production is now taking shape: All of this equipment must be moved into the venue. The production will be paying rental costs while the equipment is loaded-in. It will also take a considerable number of people to move all of the equipment from the trucks to the venue. Often the venue rental and the labor to move the show in (and out) of the venue are two of the highest costs of the production.

The designers will develop a wish list of equipment they need for the show in consultation with the technical heads of each department. This will be developed into a Bid. A Bid is a legal document where-in the production asks rental companies to quote what the costs will be. As a legal document, there are some very important pieces of information that are needed on a bid:

- Names and contact information of the designer(s), lead technicians(s), and producer(s)
- List of all the items that need to be rented including:
    - Quantities, brands, and sizes of all equipment
    - A note regarding the possibility (or not) of substituting one brand of equipment for another
- The date of pick up and return of the equipment
- The venue name and address
- If the rental company is delivering or if the production will arrange for transportation

There are some items, such as tape and tie line that cannot be rented. They are called expendables because they are consumed (destroyed) in the course of the production. Most rental houses can sell you these supplies. It is often less expensive overall to get as much of the equipment for a show from a single rental house as possible. The larger the volume a production is ordering, the better the discount they will often receive. After the Bid is sent out and quote is returned, there will often be some negotiations between the producers, designers and the rental house to get as much of the equipment the designer wants within the producer's budget.

If the production is renting a venue (traditional or otherwise), they are racking up costs every moment the production is using the space. For that reason, it is often wise to think about renting equipment that is fast and efficient to load in, even if it costs a bit more to rent. Also, everyone on the production team needs to think about any work that can be done before arriving at the venue to make the load in go smoothly.

Time in the Venue

As indicated above, time in the venue is expensive. Even if the production owns the venue, load-in and technical rehearsal time are days when the theatre is not selling tickets and not bringing in income. Scheduling a load-in is a tricky task. Only so many departments can be working on stage at the same time. The sound department likely needs quiet when testing their system, lighting requires darkness, and costumes usually want a dust free environment. The order that items are moved into the venue is also crucial for an efficient process. The technical director, production manager, and department heads must work closely together to develop a workable, realistic schedule. If the venue is rented, there are also additional fees besides just the day-rate rental fee. Often technical personnel representing the venue must be present at all times the technicians are working the building. Often these staff members are paid an hourly rate, and require adequate meal brakes, time off to sleep etc. This scheduling procedure can be messy, but taking the time to do it well in advance, means a smoother process. It is also important to remember that with so many moving parts, it is easy for the unforeseen to occur. Planning some slop space into the schedule is something experienced production managers do.

The entire technical staff should strive to develop a good working relationship with the venue staff. These staff members have often seen many similar productions come through and have valuable insights into ways to make this production better. Involving the staff in key conversations early on will allow this production to benefit from their wisdom and experience.

Additional Materials

- College of the Canyons Performing Arts Center Technical Information
- University of Southern California's Bing Theatre Technical information

CHAPTER 3: Performance Etiquette

Introduction

Theatre, as an art form, has been a part of western society for well over 2000 years. With early productions calling for the gods to descend from above, technical theatre practitioners were an early addition to the performers. With all that history, it is hardly surprising that many rules and traditions are a part of the culture. Some of these rules make sense, or at least did when they came to be part of the tradition, while others are shrouded in mystery regarding the source or reasons. Regardless of origin, technical theatre practitioners should be aware of them. This chapter will explore many of the rules, traditions and etiquette to be practiced backstage as part of a production.

Traditions

There are numerous traditions in the theatre. Many of these are more involved with the actors, but it is important that technicians respect and honor them as well.

- The play "Macbeth" is not mentioned by name in the theatre. It is typically referred to as "The Scottish Play"
- The cast and crew wish each other "Break a Leg!" instead of "Good Luck"
- No whistling is allowed backstage. This tradition comes from the days before modern communication systems when the crew members would signal rigging cues (among other cues) with specific whistles.
- Real money, jewelry or ostrich feathers should not be used as stage props or costumes.
- Flowers and other gifts should be given *after* the curtain falls on opening night, not before. Even if the gifts are delivered in advance, tradition dictates that they should not be opened or enjoyed until after the curtain has come down at the end of the performance.

Various theatres and theatre companies of additional traditions. It is a good idea to respect these traditions. For example, some theatres have a "no talking for the thirty minutes prior to the start of the show." The practical application of this is that everyone is left on their own to concentrate and prepare for the upcoming performance. Observant technicians will quickly learn the local traditions wherever they are working.

Rules

What distinguishes rules from tradition and etiquette is that absolutely must be followed. Rules are about safety and the smooth running of a performance.

- When you arrive, sign in, and don't leave until the show is over. Most theatres have a sign in sheet. It is how the stage manager makes sure everyone is there for a performance. A corollary rule is that you should never sign someone else in, or ask someone else to sign you in.

- No one, except the stage manager, is allowed to use the word "Go" on the backstage communication system (com). The word "Go" indicates that technicians should execute their cue. If someone else says "Go" a technician might take a cue at the wrong time.
- No talking on com after a stage manager says "stand-by." Stage managers will alert technicians of an upcoming cue by saying "stand-by cue X." At that point, everyone on com must be quiet so the technician(s) can hear and react to the fast approaching "Go"
- Don't touch any stage equipment, properties, costumes etc. that are not your responsibility. Many of the things we use in theatre may look like an ordinary everyday item, but often they are specially made or set up for their uses on stage. Playing with items that you have not been trained on can have disastrous effects.
- Treat all prop weapons as if they were real and (in the case of guns) loaded.
- Cell phones should be turned off. Running a show takes great concentration, and any distractions will harm the quality of the show.
- In the event of having to choose between executing a cue correctly or safely, always choose the safest option. Theatrical events are live, meaning things can a do go differently than planned. It is important for technicians to be aware of what is happening on stage and off stage and how the crew member's actions will affect it. It is not uncommon for a technician to have a more accurate view of the safety of the situation than the stage manager. Safety issues should always be addressed as soon as possible, and especially before someone is injured.
- Don't show the audience how the sausage is made. This rule has taken on greater significance since the rise of social media. The show you are working on may have a super-secret special effect or surprise. If so, don't take pictures of it for social media and don't discuss it with audience members. If you are working on some shows, such as an illusionist's performance, you will have to sign a Non-Disclosure Agreement (NDA) saying you won't reveal how the magic is done. Also, putting a show together is stressful, mistakes happen and things go badly. No matter how funny or rude or whatever an incident is, if it happened where the audience couldn't see it, it should not be discussed or shared with the general public.

Etiquette

Etiquette is the concept of correct behavior in society. I like to treat Etiquette guides as rules. The difference is that if I break and etiquette guideline, I may look foolish, but the show should still proceed.

- Assume anything you say on com can be heard by everyone in the theatre. It is not uncommon for extra com units to be around the theatre and for those not on the crew to be able to hear what is said. In fact, it is a good idea to only talk about show critical things on the com system
- Assume anything you say on stage can be overheard by everybody in the theatre. Most theatres have some sort of audio monitor that takes the sound form the stage and plays it in key backstage areas (like the dressing rooms). You can never be sure when it is on or off.

- Always arrive at the theatre at least 5 minutes early. The "call time," the time you are scheduled to start work, is the time the production expects you in your place completely prepared to work. Walking in the door at call time, and having to change clothes or get your tools is wasting the production's time.
- Anytime the stage management team gives you specific information about the show, especially how many minutes to places, the correct response is "thank you."

Some Other Guidelines to the Entertainment industry

The technical theatre industry is an exceedingly tight knit group of individuals. When joining a new company, many technicians find that they are working with friends of friends. Word gets around quickly about bad technicians, technicians who are hard to work with, and technicians that are not team players. It is also an industry where most work is short term – the length of time of the project. This means employment might be a few weeks to a few months. Gigs that last years are comparatively rare. Technicians should be at all times professional people who others wish to work with. The book will look at techniques for applying for work in a later chapter, but many opportunities come through people you have worked with in the past recommending you to producers or other employers. The other thing that has constantly surprised me in the industry is how a person in a lowly assistant position can suddenly be the person making hiring decisions. Equally as amazing is how a person who was the head of one project is suddenly back working as an assistant. None of these apparent promotions or demotions means anything more than it is now a different project with a different mix of people. I used to work with one designer on a regular basis. Frequently, I would assist her on a show, occasionally she would work as my assistant. Building good professional relationships with everyone you meet is a great asset. Additionally, learning the skills of people you have enjoyed working with is very beneficial, because some day you will be working on a project that needs a key person with a specific skill. If the person who fills that need is someone you have contact information for, you will have saved the current production, and you will have the joy of working with someone you know and respect.

Additional Materials

- "Theatre Etiquette"
- "8 Rules Every Theatre Professional Mus Follow"

CHAPTER 4: The Actor Scene Breakdown

What is a breakdown?

The first task many technicians, designers and stage managers take on when starting work on a new show is a script breakdown. The breakdown is a scene by scene (and often page by page) analysis of the technical requirements of a script. The specific layout of a breakdown and the information it contains will vary from technician to technician depending on the person's preferences and the needs of their position.

Breakdowns are typically done in a grid format, with headings of information along the top, and the location in the script along the left side. Because of the format, many designers and technicians use a spreadsheet program (such as Microsoft's Excel) to create the breakdown. As someone who started in the industry before computers were ubiquitous, I really appreciate the advantages of creating a breakdown on a computer. I find that every time I re-read the script or do any significant amount of work on the show, I am updating my breakdown. When I used to work on paper, this meant adding tiny notes, or post-its all over the original breakdown so that it became hard to read. With the computer, I can add additional lines (or columns) as needed. That said, I still regularly print out the breakdown, as I find a hard copy particularly useful while working

Note on Examples: For this chapter, and much of the rest of the book, I am going to use the play "Box and Cox" by John Maddison Morton as an example. The play is a short (40 minute) three-character, one-act play from the 1840s. Please see the accompanying text. As a one-act play with only one location, it does not have scenes designated. There are many full-length modern plays that also do not designate scenes. In cases such as those, the production team, led by the director, must determine where individual scenes are.

The Actor/Scene Breakdown

One of the first breakdowns many technicians create is an actor/scene breakdown. This breakdown charts who is on-stage for every page of the script. This knowledge assists many people do their jobs well.

- The stage manager will use this scheduling rehearsals as they know who is needed when.
- The costume designer will use it to estimate how much time there is for possible costume changes.
- It helps the scenic designer determine how many actors a specific set must accommodate.
- It allows the prop department to figure out when they will hand individual actors their props.

BOX AND COX	

Act	Scene	Page	Location	Character			Note
				Box	Cox	Mrs. B	
I	i	2	Box/Cox Flat		X	X	Description of set, hand mirror
I	i	3	Box/Cox Flat		X	X	
I	i	4	Box/Cox Flat	X	X	X	Holds up a thin bolster, off stage voices
I	i	5	Box/Cox Flat	x		x	He lights a candle, cook bacon
I	i	6	Box/Cox Flat	X	x		Cooks pork chop
I	i	7	Box/Cox Flat	X	X	X	
I	i	8	Box/Cox Flat	X	X	X	Eat roll
I	i	9	Box/Cox Flat	X	x		
I	i	10	Box/Cox Flat	X	X		
I	i	11	Box/Cox Flat	X	X		
I	i	12	Box/Cox Flat	X	X		
I	i	13	Box/Cox Flat	X	X	X	
I	i	14	Box/Cox Flat	X	X		Trick dice
I	i	15	Box/Cox Flat	X	X		Trick coins
I	i	16	Box/Cox Flat	X	X	X	Prepared letter
I	i	17	Box/Cox Flat	X	X		
I	i	18	Box/Cox Flat	x	X	x	Second letter
I	i	19	Box/Cox Flat	x	x	x	third letter
I	i	20	Box/Cox Flat	x	x	x	

- It helps the back-stage staff determine how much time they will have between scenery, or costume changes, and the order of those changes so that they can plan efficiently.
- It assists the sound designer to determine which mics need to be on when. Additionally if actors are sharing body mics, It allows the sound team to plot when the changes will happen.

Before anyone can create a breakdown, they need to read the play from beginning to end. All plays are different, and technicians will have to modify the standard format based on the needs/requirements of their production. For example, in some plays (or in some productions), one actor may play multiple characters. In those cases, when laying out the characters in the breakdown, I like to place characters played by the same actor in adjacent columns so I can see when I need which character and I can see when I need each actor. By having the columns next to each other I also can reveal when the actor may be frantically changing costume (see chapter 8). For multi-set shows, it is important to see where each scene is taking place. For a single set show, that is not as important, and may be left out of the breakdown.

The following instructions are for a generic play. To create this breakdown, begin by putting the title of the play at the top of a spreadsheet page (or page of graph paper). Create the following columns: Act, Scene, Page, Location. Additional columns are needed for each character. The order of the character columns should be considered to make it most useful for the technician making the list. The final column should be headed "notes." In many ways the notes column can be the most important. In this column you list anything that you think will affect your job that does not appear in any other column. If you find that you have many listings that seem to be of a similar category, you should go back and add a column with that heading.

Once the columns are made, you will start going through the script page by page, and filling in the information. If a character is on stage, simply mark an X in the correct box. If you find that a scene begins somewhere other than the top of the page, you should create a new line because different scenes will be treated differently, even if they are on the same page. Below is my initial breakdown for "Box and Cox."

Initial Actor Scene Breakdown

After looking at the breakdown, I notice that the entire play is one act, one scene, and in one location. Since it is just one location, that column isn't needed and can be deleted as it doesn't really supply any useful information. The fact that it is entirely in one act, and very short (about 40 minutes) means that the production will be unlikely to add an intermission, so that column could be deleted. The fact that it is only one scene is actually problematic. It is easier to discuss and rehearse a play in smaller chunks. Those chunks are usually 5 to 10 minutes in length. The usual term for those chunks in scenes. Many production teams will break the play up into scenes differently than the playwright. A particularly long scene (as in this play) may be broken into multiple scenes. Similarly, two very short scenes that are back to back that use the same characters may be "combined" into one scene for rehearsal purposes. This is a matter

for the production team, which consists of the stage manager, director, technical director and designers, to make together.

Suddenly we notice that our initial breakdown needs to be edited and updated. This is very common, and precisely why I like working on a computer where changes and edits are easy to do. For this example, we will delete the Act and location columns. We will also examine the script and the breakdown to try to break the play into 3-6 scenes for rehearsal purposes. The revised version is below.

Revised Actor Scene Breakdown

BOX AND COX

Scene	Page	Character			Note
		Box	Cox	Mrs. B	
i	2		X	X	Description of set, hand mirror
i	3		X	X	
i	4		X	X	Holds up a thin bolster, off stage voices
ii	4	X		X	NEW SCENE: Box Enters
ii	5	x		x	He lights a candle, cook bacon
iii	6	X	X		NEW SCENE: Cox Enters
iii	6	X	x		Cooks pork chop
iii	7	X	X	X	
iii	8	X	X	X	Eat roll
iii	9	X	x		
iii	10	X	X		
iii	11	X	X		
iii	12	X	X		
iv	13	X	X		NEW SCENE: Mrs. B. Enters
iv	13	X	X	X	
iv	14	X	X		Trick dice
iv	15	X	X		Trick coins
iv	16	X	X	X	Prepared letter
iv	17	X	X		
iv	18	x	X	x	Second letter
iv	19	x	x	x	Third letter
iv	20	x	x	x	

As you can see, the production team ended up breaking the play into 4 scenes for rehearsals. Even though scenes iii & iv required the same actors, they felt that 14 pages of script was too long to be considered a single block, and that there was a logic to where they separated them. Another option would have been to break the play into 5 scenes, by splitting scene iii either when Mrs. B enters or exits. Decisions in the matter must be left up to the best judgement of the production team.

Spotting Problems

While there are many useful purposes for this breakdown, one of the biggest things it should do is bring problems and challenges to the attention of the technical staff as soon as possible. Costume and set changes tend to be easily noted from the breakdown, however in the example play, there are none. We do notice in the break down that the actors cook bacon and pork chops on stage as well as eating a bun. Food props, and cooking can be very challenging, and should be discussed early on by the technical staff involved. We also have trick dice and trick coins that may need to be considered depending on the size of the theatre. Off-stage voices will have to be considered by the sound department. Since all the designers and lead technicians will perform a breakdown, any potential problems should be spotted.

Other Ways to Organize a Breakdown

Musicals, while often broken into scenes, often merit special consideration. Additional requirements for a moment may be brought about due to a song or dance section. Often, when breaking down a musical, I treat a song (or dance) as its own scene. It will have additional special rehearsals (music/choreography) and may involve additional performers not specifically listed in the script. Sometimes a director or choreographer will add additional performers for a dance, or to enhance the vocal qualities of a song. Sometimes these performers are not on stage but are singing from off-stage. They are still needed for rehearsals, and if they are singing off stage, it means they cannot also be doing a costume change or appearing on-stage.

Some plays, especially Elizabethan plays (like those by William Shakespeare), and large scale musicals will have many small, one-scene roles. While a high school or a college may cast a unique and individual actor for each role, professional companies often try to use as few actors as possible. This means that a small one-scene role in the first scene, may be played by the same actor who plays a different one scene role in the third scene. Sometimes a director will try to assign the actors to the multiple roles so that some artistic statement is made to the audience. For example, in the musical “Little Me” the leading lady has a series of husbands and boyfriends throughout the show. Traditionally, one actor plays all of the men in her life. In this case the breakdown will allow a director and production team see if this symbolic double casting is possible. Sometimes it is merely a matter of filling all the small roles with as few people as possible to make the budget work. Again, the breakdown will allow this doubling to be determined.

Follow this link to view a breakdown for William Shakespeare's Measure for Measure. In addition to a simple X to notate if a character is on stage, the person who did this breakdown noted every time a character left of entered the state.

Additional Materials

- "Box and Cox" script:
- "Box and Cox" on stage, as a 3rd year directing project from Playwright's Horizons School
- An example of a breakdown from the "Awesome Stage Manager Blog"

CHAPTER 5: Scenery

The Scenic Breakdown

As was mentioned in Chapter 4, every designer and lead technician will create a breakdown. The scenic designers break down will include required scenery that is mentioned in the script, and any other special requirements.

Initial Scenic Breakdown

The scenic designer will use this to discover the requirements of the set, and of any particular set pieces. Some designers might do the breakdown by scene instead of by page. I recommend against that, as it is advantageous to know exactly where something occurs in the script. Knowing the exact page number (as opposed to just which scene), allows anyone involved to read the exact description in the text.

Very often, especially in a play that was written in the last 50 years or so, the script will have a sketch in the back of the set. This set is usually the set from the first (or most recent) New York or London production. That design is the intellectual property of the designer of that production, and cannot be duplicated without their permission. It is included in the script because the stage direction found in the script were generally created, or at the very least edited, by the stage manager of that production. The sketch may make some of the stage directions clearer. Subsequent productions must attempt to figure out what was the original playwright's intended scenic material, and what was the invention of the original production team. Generally, any scenic requirements mentioned in the text (dialogue) must be accounted for, while other items may be from the original designer.

BOX AND COX

Scene	Page	Character			
		Box	Cox	Mrs. B	
i	2		X	X	Bed with curtains, Closet door, "Front" door, Fire place, table/ 2chairs
i	3		X	X	Closet must hold at least 3 hats
i	4		X	X	Bed must have a removable bolster, must be able to be quickly remade
ii	4	X		X	
ii	5	x		x	
iii	6	X	X		Lights Fire, lights candle
iii	6	X	x		Throws food out of Window (Need Window)
iii	7	X	X	X	
iii	8	X	X	X	On stage smoking

iii	9	X	x		
iii	10	X	X		
iii	11	X	X		
iii	12	X	X		
iii	13	X	X		Need either on stage bells or bell pulls to be rung
iv	13	X	X	X	
iv	14	X	X		Cupboard containing trick dice. 2 sets of trick dice which always throw 6
iv	15	X	X		Trick coins which always land heads
iv	16	X	X	X	
iv	17	X	X		
iv	18	x	X	x	
iv	19	x	x	x	"Front" door must have enough clearance to get a letter under it
iv	20	x	x	x	

The Official Drawings

The scenic designer will develop many drawings to detail what the set will look like. Most of these drawings will be in-scale drawings, which means that a certain measurement on the drawing equals a certain measurement in real life. Two common scales in theatre drawings are ½" scale and ¼" scale. ½" scale means that one half of an inch on the drawing is equivalent to one foot on the final constructed set. This is the same as the drawing be 1/24th of life size. Similarly, ¼" scale means that one quarter of an inch on the drawing is equal to one foot on the final set. This is the equivalent of saying that the drawing is 1/48th of life size.

To make it easier to determine the size of something on a scale drawing, and not resort to math, you can use an architect's scale rule. These are special rulers with approximately 11 different scales represented. The rulers have done the math for you so as you measure with them it tells you what the full size will be. To learn to use a scale ruler, watch this youtube video.

Scenic designer drawings will include many things, including details on each and every set piece that must be built by the scenery or prop shops. Four drawings are of interest to the general technician. They are the Ground Plan, the Elevation, the Section Drawing, and the Rendering.

Rendering

The first type of drawing we are going to look at is one that is not done in scale. This type of drawing is called a rendering. It is a perspective drawing of what the set will look like. Sometimes designers create these by hand, or they are sometime computer generated. While this drawing is often very useful for determining what the set will look like, they cannot be

relied upon for an accurate measurement. We are looking at this drawing first so that readers can get an understanding of what the set will look like which will help in understanding the scale drawings of the set.

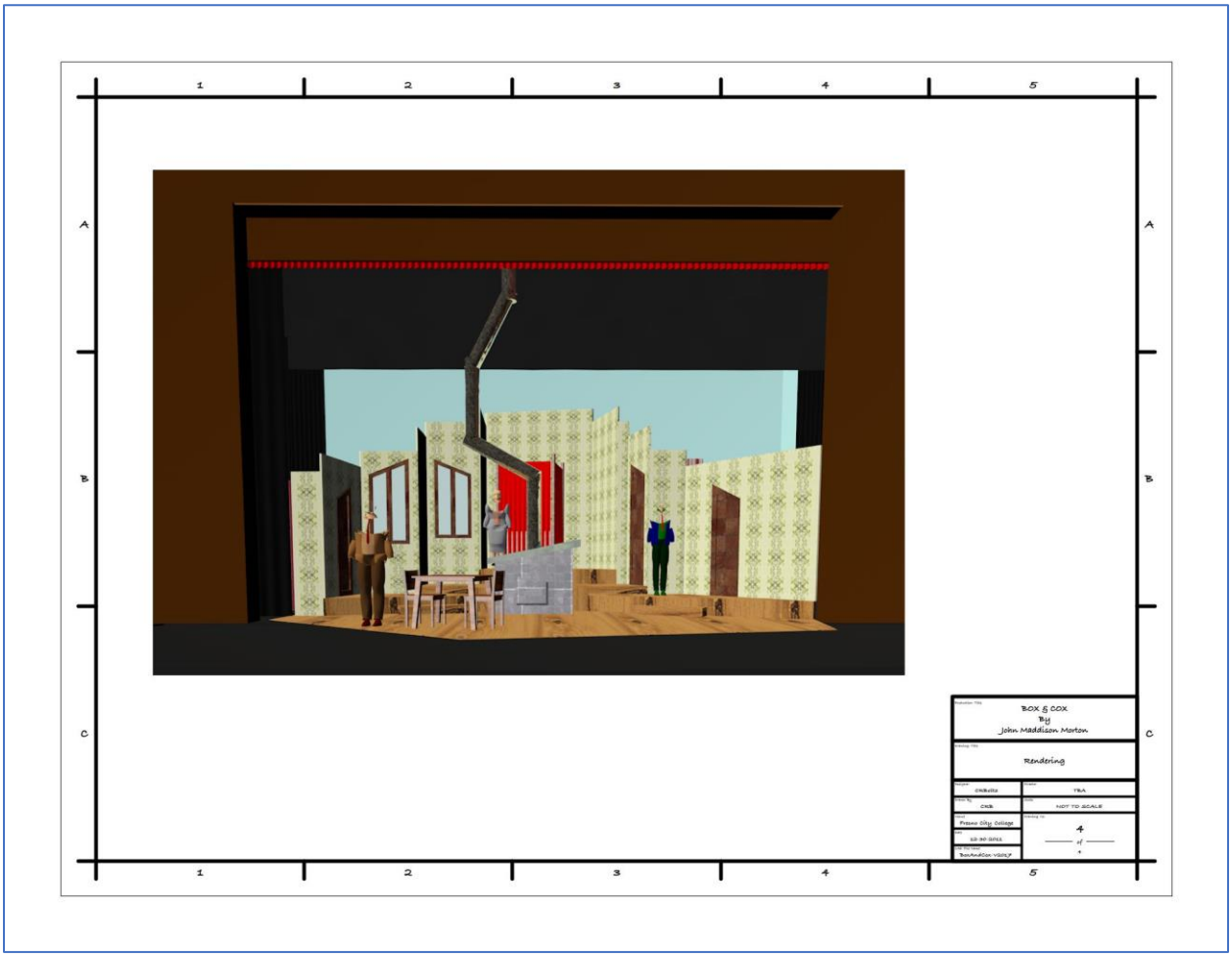


Figure 1. Designers Rendering

Above is an image of the designers rendering. If this was presented at full size, the paper would be Architectural C Size paper (18” x 24”). It has been reduced to fit in this text. In the lower right-hand corner of the page is a title block.

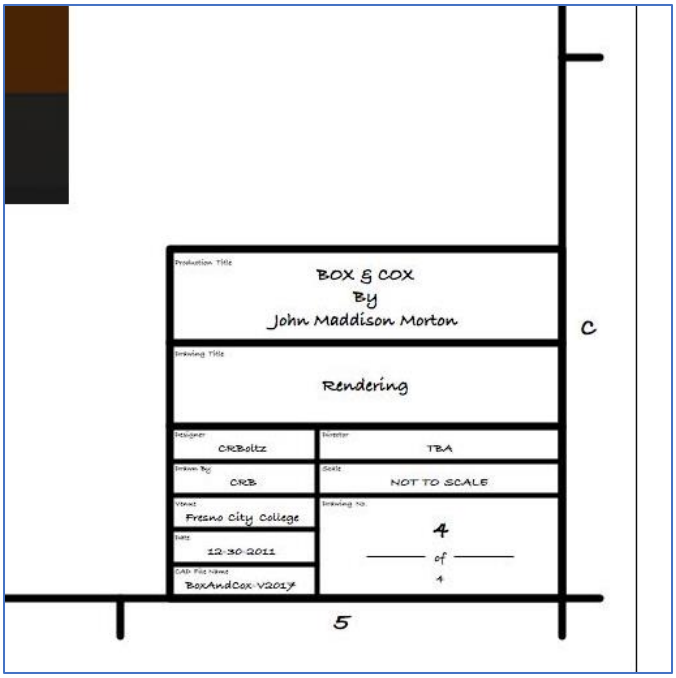


Figure 2. Title Block

The title block holds important information. At the top of the block is the title of the show. The next segment details what this particular plate shows. Plates are the names given to individual pages of a scenic design package. In the smaller boxes, you find other important information, such as the designer, draftsperson, scale, page number for the entire set and the date. The date is very important, as frequently through the production process, the design will be updated. In the case of different plates having contradictory information, the plate with the later date should be considered correct.

Ground Plan

The ground plan is often the first drawing created, and often the one most often referred to by most of the production team. The ground plan shows what the stage looks like from above. This drawing is in scale but uses many symbols. It shows not only the on-stage spaces, but the off-stage spaces as well. This is important as the technical staff will often need to figure out where to place the backstage technical equipment and provide storage for additional stage crew needs.

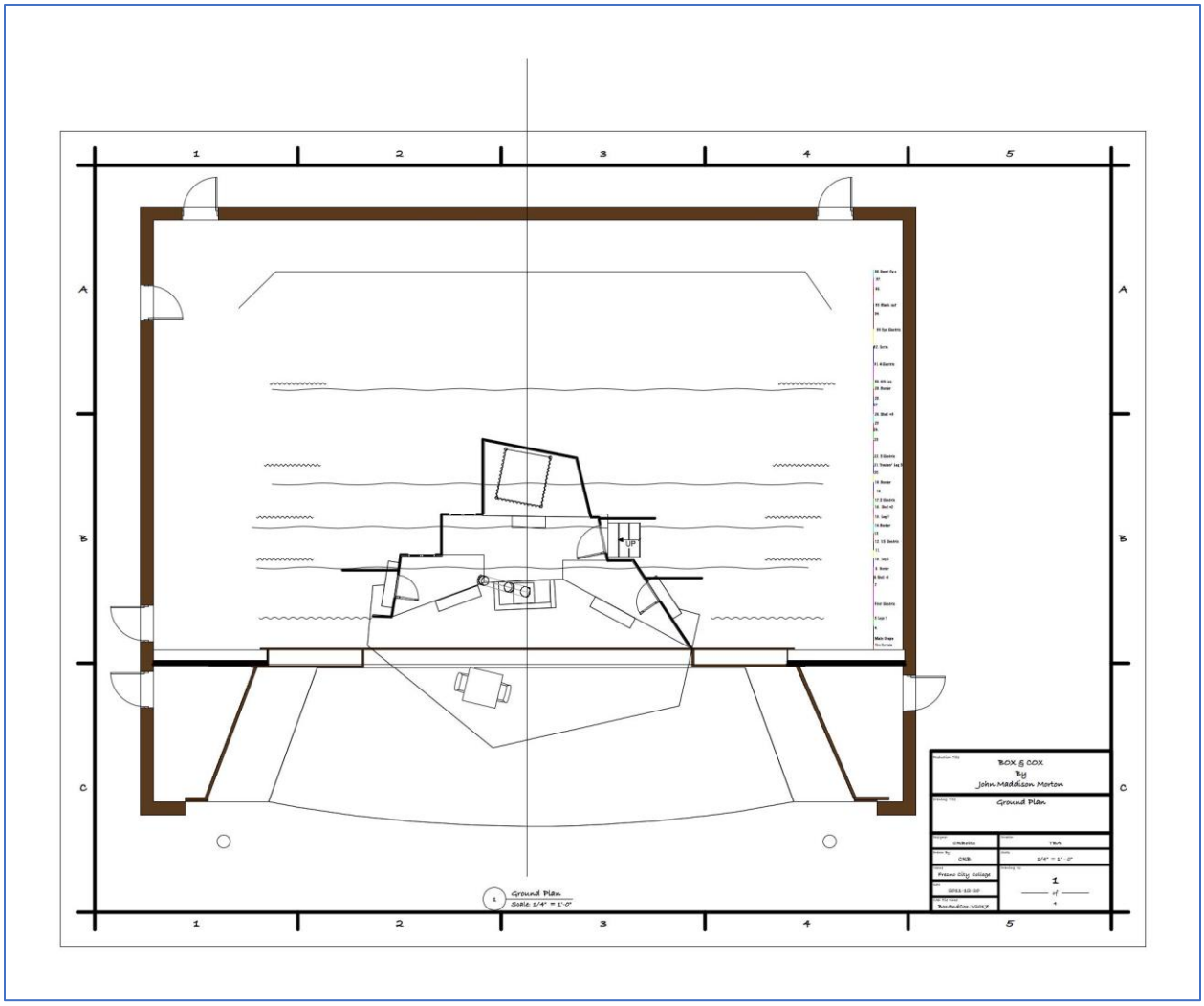


Figure 3. Ground Plan

On a plan, doors are shown as a symbol in an open position. Chairs and tables are regularly also shown as a symbol. Designers may show the height of various platforms with a number. The number is the height, in inches, from the stage floor. Off on the right side, you see the fly system, and an indication of what is hung on each pipe. Lastly, there are two circles on each side, down stage of the apron. Those are an indication of the sight-line seats, or the two seats that will have the best view of the backstage areas. These are indicated on the drawing so that the crew knows how far off stage they have to be to avoid being seen.

Elevation

An elevation drawing may, at first look, seem like it is the same as the rendering. It is not. An elevation is a front view, with no perspective that is in scale. This provides information about the height of various parts of the set. Elevations, Renderings, and sometimes sections often include a human figure. This gives a reference to judge sizes of set pieces quickly without getting out a scale ruler. Because elevations are shown from straight-on, a view relatively few

audience members often have, it sometimes does not give all the information someone may want.

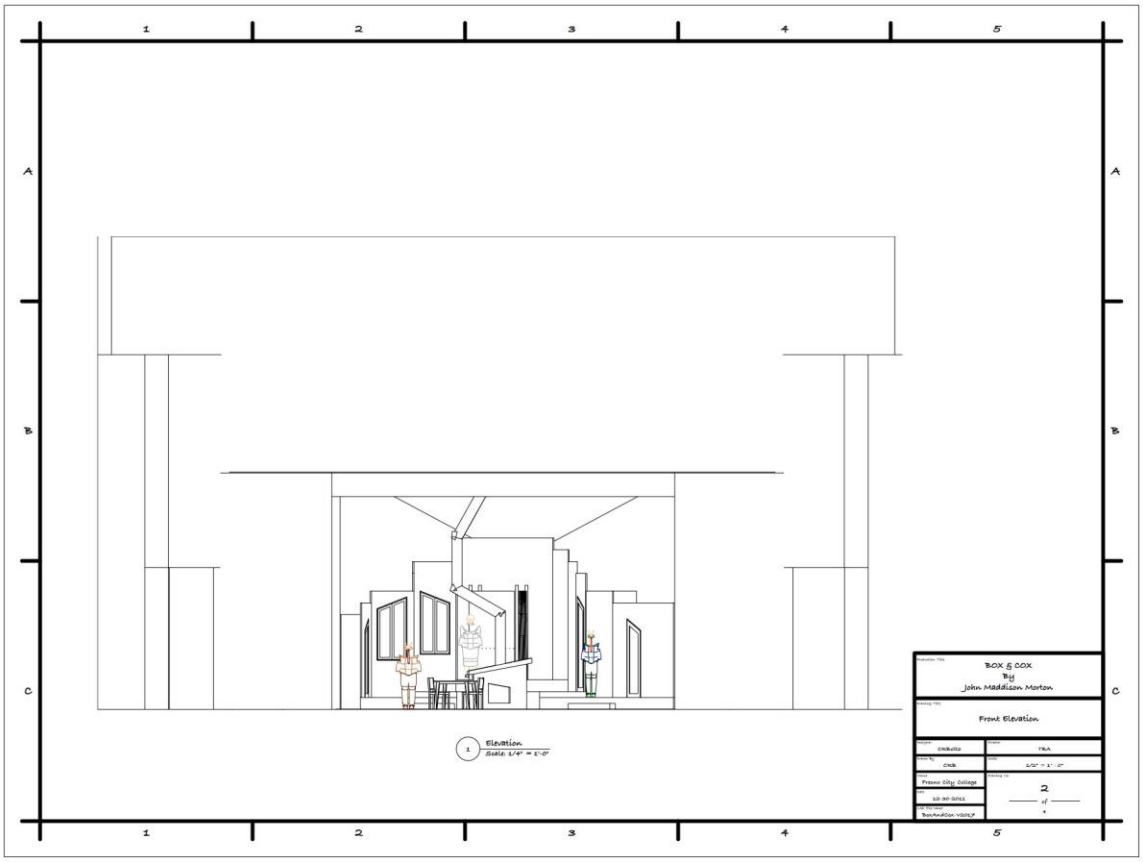


Figure 4. Elevation Drawing

Section

The center-line section drawing may be one of the more challenging drawings to understand. Imagine that someone has chopped the theatre in half along the center-line of the stage. (The center-line is an imaginary line that runs from upstage to downstage, perpendicular to the proscenium opening, and exactly bisecting the proscenium opening.) After they have chopped the theatre in half, they throw away one side, and then create an elevation as if they were standing on the thrown away side looking at what is left.

To show items that are cut through, they are often drawn in heavy bold lines. In the below example they are shown in red (which is standard in the drafting program, VectorWorks). Section views can be of either stage left or stage right. The designer should select the side which is more unusual, otherwise, they might consider drawing both sections.

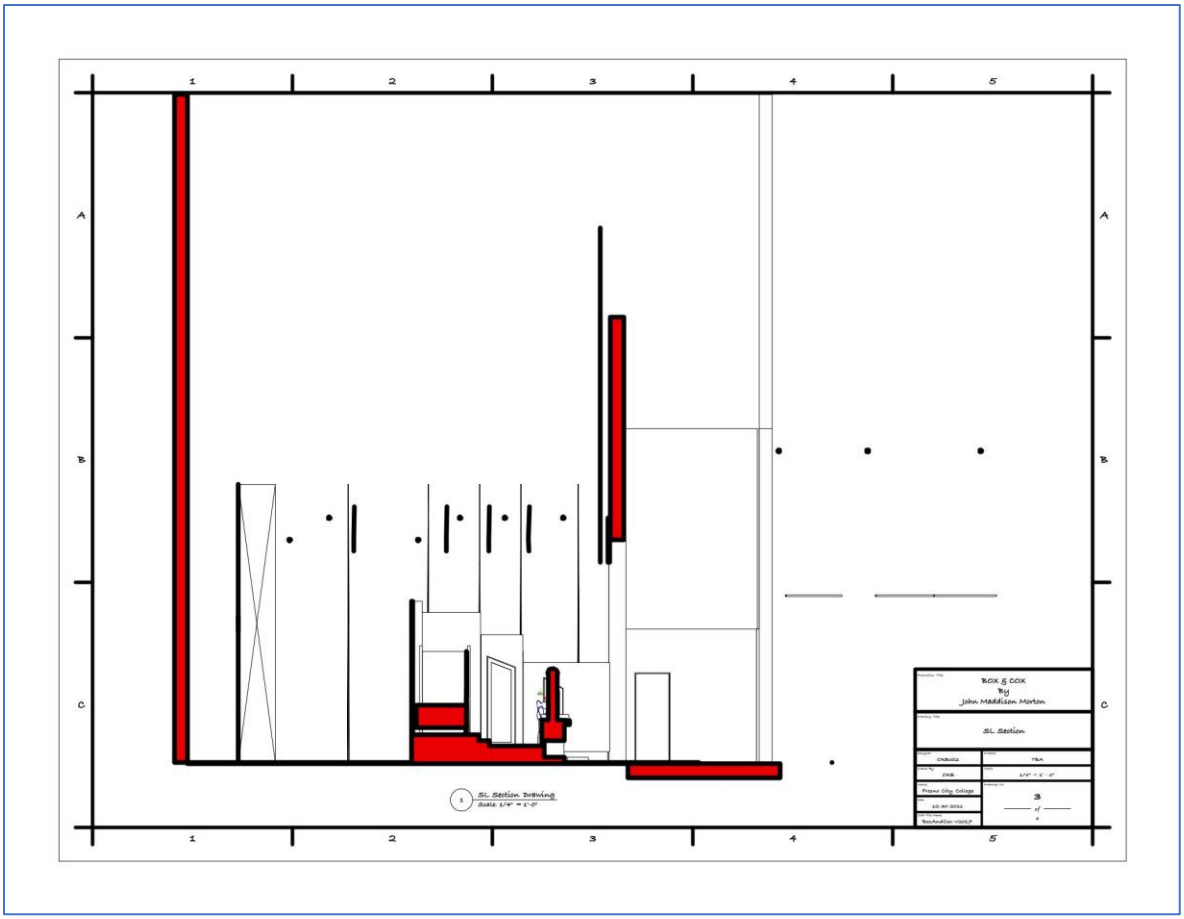


Figure 5. Section Drawing

Taping a Stage

One of the first things that the technical staff or stage management team will do with a ground plan is to tape out the floor of the rehearsal room. A tape out is recreating the ground plan at full scale with spike tape on the rehearsal room floor. Most shows do not get to rehearse on the set until shortly before their first public performance. The taped-out floor gives performers and directors and other production staff a chance to make sure the show fits in an accurate representation of the space.

To tape out the floor, you will need the ground plan, a scale ruler, two long tape measures (one large enough to measure from the down stage edge of the stage to the upstage edge of the set, and one large enough to measure from center line to the farthest stage left and farthest stage right set pieces), spike tape in several different colors and a carpenter's square.

Determine where the down stage edge of the set on center line will be in the rehearsal room. Mark this spot carefully with spike tape, and lay a tape measure with the "0" on this spot going directly upstage. All of your upstage/downstage measurements will be taken from this tape measure. For each point on your drawing determine how far upstage it is from your down center space, and how far to stage right or left. Take all measurements from the center line,

and use the carpenter's square to ensure that your left/right measurements are perpendicular to the center line. The reason for this is that if a mistake is made on one measurement, it is not compounded as it would be if you took a measurement from an existing point that is not on the center line.

Additional Materials

- Taping out the floor for "A Christmas Carol" at the McCarter Theatre Center in New Jersey.

CHAPTER 6: Stage Properties

Categories of Props

Stage properties, or "props," are those items that are not permanently attached to the scenery, or costumes, that add to the visual picture of the shows. If that definition seems a bit vague, you may have discovered why props are such a varied and interesting section of technical theatre. Props can be divided into the following categories by their use in the final show:

- Set Props / Furnishings: These are large items that are rarely, if ever, moved by the cast in the course of the show. These include tables, chairs, settees etc.
- Set Dressing: These are items that are not touched by the actors but complete the look of the set. These include books on a book case, pictures on a wall, fancy plates in a china cabinet, etc.
- Hand Props: These are items carried by and used by the actors in the course of stage directions or stage business. These include such things as a cell phone an actor uses, a coffee mug they drink from, a journal in which they take a note, etc..
- Costume Props: These are items that are not generally considered clothing, but would be designed by the costume designer and worn by the actors. These include hats, eye glasses, wallets, pocket watches, etc.

Some props have additional requirements which they must meet. These additional categories of props are a description in addition to any item above.

- Practical Props: Any item that is a practical prop is also one of the other categories listed. A practical prop is one that must perform its real-world function. For example, a cell phone (hand prop) that an actor needs to hold and imagine that they are using to make a call is not practical. However, if that cell phone needs to ring on cue, it is now practical hand prop. Similarly, a lamp that sits on the stage is set dressing, until it is determined that it must also turn on. Generally, if the prop must light up or make a noise, especially if cued somehow from off stage, it is considered a practical prop.
- Consumable Props: Like practical props, consumable props fit into an additional category. A consumable is one that is "used up" over the course of one or more performances. Food that is eaten by the cast on stage is an example of a consumable prop, as are letters that are torn to pieces by the cast. If a show has a practical flash light, its batteries and lamp would be considered consumable.
- Rehearsal Props: Often the "real" props are not available for the rehearsal period. In those cases where the actors need certain props to rehearse, but do not have access to the real prop, a substitute, or rehearsal prop, is acquired. Rehearsal props need to be approximately the same size and weight as the real prop, but are generally a cheap substitute that does not have the correct look.

For example, even though a play may be set in the 1800s, the cast could rehearse with a modern composition book instead of a period diary, assuming the composition book was approximately the same size as the final prop will be.

One of the most confusing things about props is that an item, such as a hat, may be in different categories depending on the show. For example, if the hat is attached to a mannequin in a window and never touched by the cast, it might be considered furnishings. In another show, the hat may be hanging on a hat stand, but not used by the cast, making it set dressing. Yet, another show, an actor, playing a maid, might hand the hat to another actor who carries it off stage with them, making it a hand prop. In a final example an actor might wear the hat, making it a costume prop.

Another confusing layer is what department will supply that hat. As the costume department often has more hats in their storage, they may supply that hat regardless of its use in the show. Props may be supplied by the props department, the scenery department or the costume department depending on the prop and the production team. Some props may take collaboration between departments. For example, a table lamp may be supplied by the scenery department but may be wired and made practical by the electrics department. In all cases, clear communication between departments, facilitated by the stage manager, is essential. Often all the designers and department heads will meet to examine the prop lists developed by each department and the stage manager. At this point they will collaborate on who will supply each prop.

Creating a Prop List

A prop list, can be created much like we were creating our breakdowns. If so, it might look like this:

Initial Prop List

Page	Prop	Type	Note
2	Bed	Furnishings	With curtains
2	Chest of Drawers	Furnishings	
2	Table with 2 chairs	Furnishings	
2	Assorted decorations	Dressing	
2	Small Looking Glass	Hand	
3	Hat	Costume	
3	2 other hats	hand	
3	Bolster	Hand	"not very protuberant"
5	Rasher of Bacon	Hand	

5	Box of matches	hand	almost empty
5	candlestick	hand	with small candle
6	Pork Chop	Hand	
6	Gridiron	Hand	
6	Fork	hand	
7	Tea things	hand	
7	2 receipts	hand	
8	Roll	Hand	Eaten
8	Pipe	Hand	
14	2 trick dice	hand	always roll 6
15	2 trick coins	hand	always heads
15	additional coins	hand	
16	Letter in envelope from Margate	hand	envelope will need to be replaced nightly
18	Letter in envelope from Margate	hand	Envelope will need to be replaced nightly
19	Letter in envelope from Margate	hand	Envelope will need to be replaced nightly

Like many shows, this initial prop list is mostly hand props. Hand props are the most obvious props in the script. Set dressing is almost non-existent on the list. Set dressing props are determined by the scenic designer based on his or her design, and will often be presented as a list to the prop department.

You might notice that the gridiron is used several times in the show, yet only appears on the prop list once. That is because if it appeared several times, the prop department would supply a new gridiron for each use. Similarly, since there are three letters form Margate, the prop department will supply three, which is what the show requires.

After this list is created, the production team will decide who will be responsible for acquiring each prop. For example, there are three hats, one a costume prop and two hand props. The

costume department might decide to provide all three hats so that they work together to create a pleasing image on stage. Similarly, the scene shop may decide that such a large piece as the bed is too large to be built in the prop shop, and decide that it will be created in the scene shop.

Acquiring Props

There are basically three methods of acquiring props for a show: build the prop, buy the prop, or borrow the prop. Each method has its own advantages and disadvantages. After determining which department will provide the prop, the department will examine the script to determine which method should be used to acquire the prop.

Building is perhaps the easiest method to understand. The script is examined, the prop is sketched, and then the department builds it. This method allows the prop to be created to meet the exact needs of the show. In some cases, this is the only method available, especially when doing a fantasy or science fiction based show. The disadvantage of this is that it can take a great deal of time and expertise to build certain props, which may be a limiting factor. One other consideration is that it is sometimes most costly to build a prop rather than buying it. For example, it is possible to melt wax and dip wicks to create the candle for the prop list. This task however would likely a props artisan several long days to create the one candle needed for the show. It is probably much more cost effective to spend a few dollars buying a candle.

Buying the prop is often the fastest method of acquiring a prop, especially if you are doing a play set in contemporary times. With the advent of internet searches, even historical reproductions can often be quickly purchased and shipped to the theatre. The challenge with buying props is that stage performances are often much harder on a prop than real life. There is a stereotype in musicals of people dancing on tables. The average table that you buy is not strong enough to have several people tap dancing on it for 8 performances a week for many weeks on end. In that case, even if the table was purchased, the scenery or property department would have to spend time reinforcing and strengthening the table. It is not uncommon however to purchase a prop and modify it for use. For example the hats needed may be purchased as a simple hat, and the costume crafts person may add flowers, and hat bands and other embellishments to make it suit the play.

The last category is borrowing a prop. If you are located in a major theatre, film or television market there are often prop rental companies that have an extensive supply of all sorts of varied props. Often these companies have a website that you can peruse to find what you need. If you are not in a major market, it is common for props people to build a relationship with all the other theatre's nearby and contact them to see if they will rent out their props to your production. When renting props, you will have to provide the rental company with proof of insurance so that if the prop is damaged, they will be able to replace it. Additionally, rental agreements usually prohibit the prop from being changed in any way. This means that if you don't like the color of the prop, or some other decoration you are stuck with it. The other challenge with renting props is the cost. Props are generally rented by the week. To save

money, producers usually do not like to rent the prop for more than a week before opening night, which means the cast will have limited abilities to rehearse with it. The producer will need to be involved in any rental as there are required legal agreements that must be signed. In general, it is the producer's responsibility to sign and pay for these items, not the prop technician's.

Another type of borrowing is to "borrow" the prop from the theatre company's own storage. After a show closes, many companies take the props from the production and store them in a prop storage room. These props can then be used as rehearsal props or as show props for future productions. Different theatres have different rules on modifying props from storage, but they are often far more flexible than a rental company would be.

One last note on borrowing props: it is not a good idea for the prop technician (or any production team member) to loan a prop to a production. Too often, this is the prop that is accidentally broken. Since there is not legal agreement, or proof of insurance issued, there is no recourse or ability to have the prop repaired or replaced. Certainly, in no circumstance should a theatre ever borrow (or rent) a truly irreplaceable and unrepairable prop. There are too many things that could go wrong.

At some point, the stage manager will create a list of those props that are needed for rehearsal. In some theatre companies it is the responsibility of the stage manager to acquire rehearsal props, and in some theatres it is the responsibility of the prop department. Regardless, when that list is generated, rehearsal props need to be provided to the rehearsal room as soon as possible.

Revised Prop List

This prop list is updated to show how the prop will be acquired, if it is practical or consumable.

Page	Prop	Type	Note	Pract.	Cons.	Rehers	Buy	Build	Rent
2	Bed	Furnishings	With curtains					X	
2	Chest of Drawers	Furnishings							X
2	Table with 2 chairs	Furnishings						X	
2	Assorted decorations	Dressing							
2	Small Looking Glass	Hand				X		X	
3	Hat	Costume				X		X	
3	2 other hats	hand						X	
3	Bolster	Hand	"not very protuberant"				X		
5	Rasher of Bacon	Hand				X		X	
5	Box of matches	hand	almost empty	X	X	X	X		
5	candlestick	hand	with small candle			X			X
6	Pork Chop	Hand				X		X	
6	Gridiron	Hand				X			X
6	Fork	hand				X			X
7	Tea things	hand							X
7	2 receipts	hand				X		X	
8	Roll	Hand		X	X		X		
8	Pipe	Hand				X			
14	2 trick dice	hand	always roll 6			X		X	
15	2 trick coins	hand	always heads			X		X	
15	additional coins	hand					X		
16	Letter in envelope from Margate	hand	envelope will need to be replaced nightly		X	X		X	

18	Letter in envelope from Margate	hand	Envelope will need to be replaced nightly		X	X		X	
19	Letter in envelope from Margate	hand	Envelope will need to be replaced nightly		X	X		X	

Prop lists are in flux throughout the rehearsal process up to opening night. The stage manager is often sending out updates, and there will be many meetings and discussions about props.

Props in the Theatre

Eventually all the props (along with the set, and the costumes, and the actors) will move into the theatre. Generally props are stored in a room of their own, or in a specially constructed cabinet. It is important that the props crew organized the prop storage area so that each prop in the show (and any back-up props or additional supplies (like batteries)) have a specific place that they live. A list of all the items in the prop cabinet needs to be created. When a prop leaves the storage area it must be signed out by a prop technician. When the prop is returned, it should be signed back in. It is very easy to not bother checking props at the end of the night, but if the prop crew does not, something will eventually be lost. A helpful trick is to take a photo of the properly loaded prop storage area and keep the photo(s) with the list. People are often much faster to noctice if something is out of place compared with the photo than notice an error on the list.

For the performance, props will often be placed on prop tables so that they are easily accessible and in the correct location for whomever is grabbing or replacing a prop. The prop table should be laid out exactly the same way every performance so that each prop as its own, clearly defined space. One way to do this is to cover the prop table with butcher paper or craft paper. Once the prop table has been laid out, trace each prop with a thick black marker, and label what it is. This makes it easy to spot missing props, or misplaced props because they traceout brings the organizational structure to everyone's attention. Ideally there will be a prop table on each side of the stage so that someone does not have a long distance to go to grab the prop they need.

Additional Materials

- History For Hire prop shop
- Omega Cinema Props (one of the largest prop companies on Los Angeles)
- Thurston James has written one of the most comprehensive book series on theatre props.

CHAPTER 7: Stage Lighting

Reading a Light Plot

Most technician's first encounter with lighting is when installing, or hanging, the lighting for a show. The light plot, like many of the technical drawings examined in chapter 5, is in scale. The light plot is full of symbols.

A Light Plot

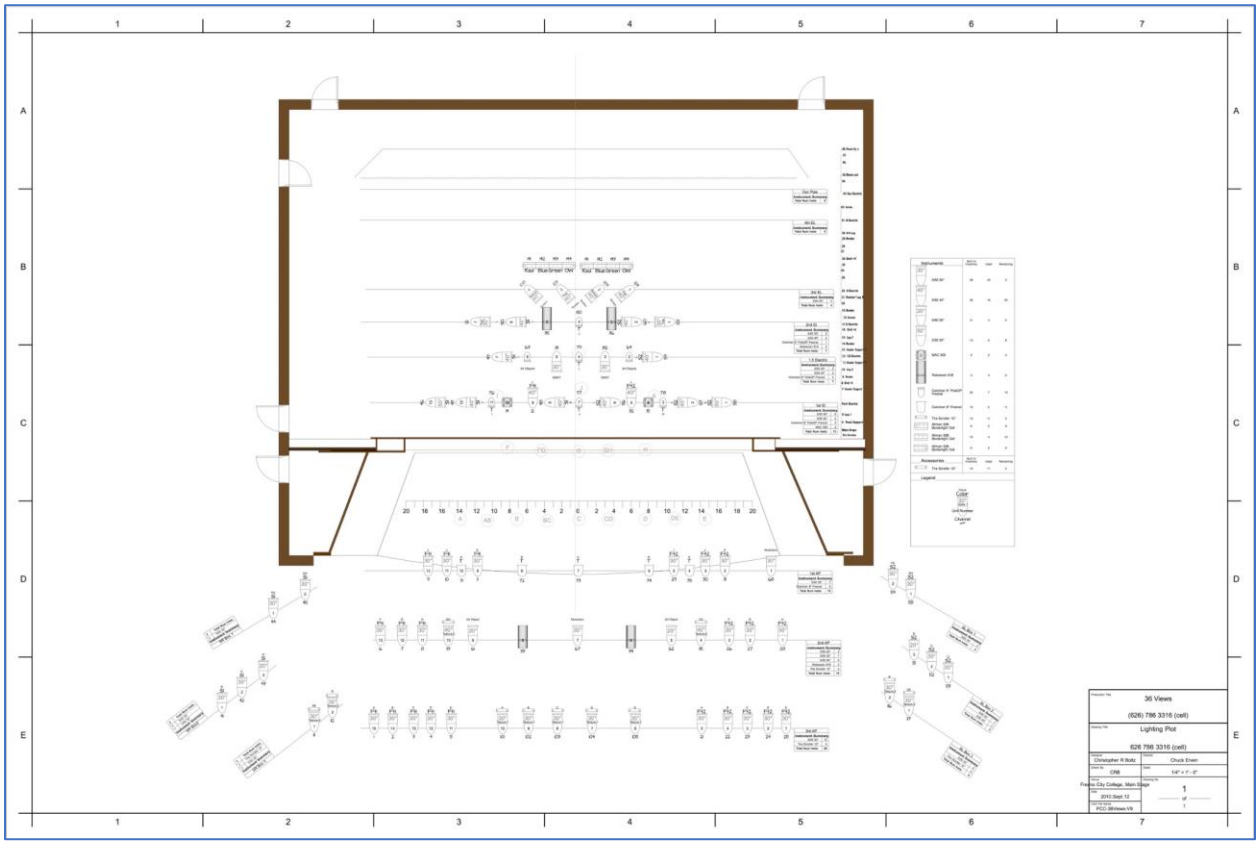


Figure 1. Light Plot

The light plot looks similar to the ground plan, including the title block in the lower right-hand corner. The set is sometimes represented, but often it is not. Instead of accurately drafting all the lights, they are replaced by symbols. This is important as lights, though different, look the almost identical. Around each lighting symbol, you will see a series of numbers. Although there are some accepted standards, the symbols and the numbers will vary from designer to designer. Fortunately, lighting designers always include a key and a legend to explain what everything is. Most stage lighting positions are parallel to the stage floor. Some theatres also have lighting positions that are perpendicular to the stage floor, often called booms. Many light plots will express this image as a diagonal line, with the bottom of the position represented by

the side that is closes to the center line. Many designers also include a dimensioned line so that people installing the light plot do not need to carry a scale ruler with them.

Key and Legend

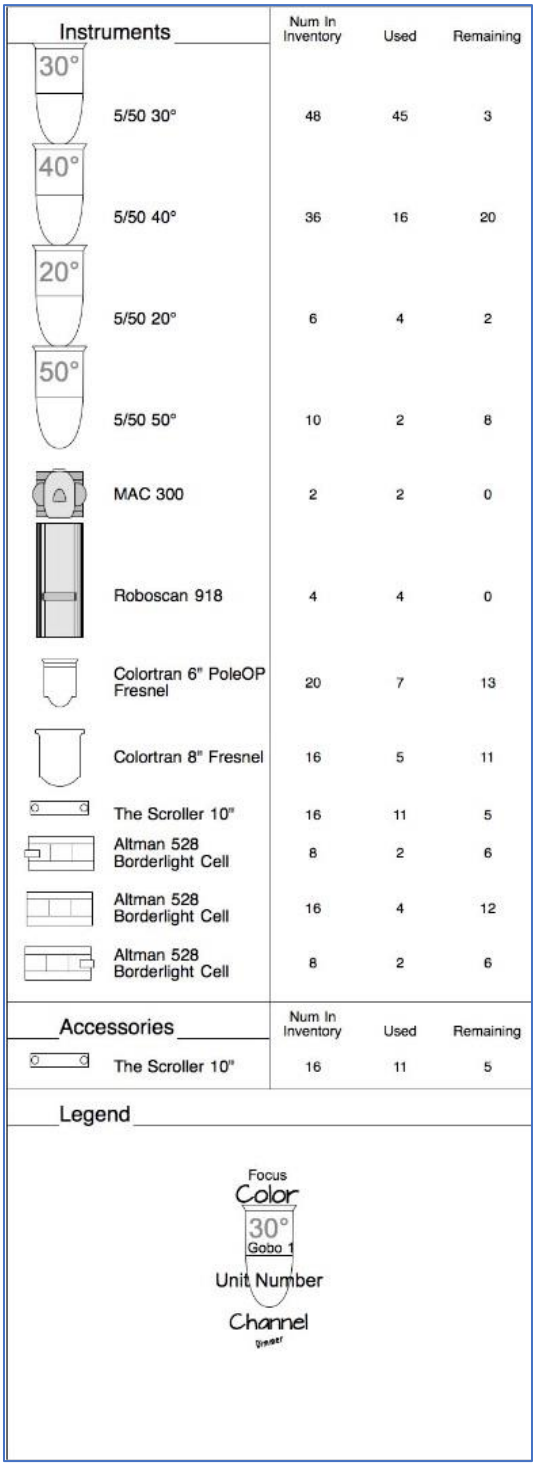


Figure 1. Light Plot Key

At the top of the above illustration, you see the key. Each light symbol is shown, in scale, with an explanation of the type of light it is next to it. The designer in the above example, has included additional useful information. It shows how many of each type of light the theatre owns, how many the designer has used and how many are remaining in inventory. This list can greatly assist the electrics crew as they are moving lights from storage to the theatre.

Below the key is the legend. The legend details all the information around the light. Different designers will place the information in a different location, sometimes in circles or squares or rectangles.

- Focus indicates where the light hits the stage. The information can allow the electricians to pre-focus the light in vaguely the right direction.
- Color indicates what brand and catalog number of the color media which will tint the light from white to whatever color the designer desires.
- Gobo indicates the gobo, or metal template inserted into some lights to create a shadow pattern in the light.
- Unit number, is the only information that appears on all light plots. The unit number is unique to each instrument on a lighting position. This allows electricians and designers to specifically identify any light in case of problems or required adjustments.
- Channel number is the name that the programmer of the computer that controls the lighting system uses to turn on the light.
- Dimmer is the name of the device that illuminates the light. The industry is moving from the term “dimmer” to the term “address.” Dimmers are not much of a part of newer lighting systems as they once were. Address is a more generic term that refers to the way the light will be controlled system.

Load-in and Focus

The electrics crew, led by the master electrician, will examine the light plot to make sure they have all the color, gobos, lights, and power cable indicated by the light plot. They will get all the equipment together. On the day of the load-in, when the lights are installed in the theatre. It is important that the correct light is installed. It is important that the lights are placed correctly and pointed in the correct direction. The crew will work to power all the lights. It is important when running power cable that you run from the source of the power to the lighting instrument. This is because, in the event the light needs to move you want any spare cable near the light, not at the power source. After the lights are hung, all the color and gobos need to be installed. Once all the lights are plugged in, the master electrician will work with the board operator to patch the lights in the lighting control desk. Patching is the process of connecting the address that controls the fixture to its assigned channel number. After this process, it is important to do a dimmer check. Each channel will be turned on and checked that it is the correct light, with the correct color and the correct gobo.

Once everything is working, the designer will come into focus the show. Focus is a process where each light is turned on and under the direction of the lighting designer will point each

light where it is supposed to be. Focus works best if each step of focus is done in the same order. The order is usually similar to this:

1. Remove any color media from the light
2. Set the focus to the format the is best for the light
3. Point the light so the center of the beam is on the designer's face. The designer will often make small adjustments until it is perfect
4. Adjust the quality of the beam under the designer's direction.
5. Replace the color and gobos.

After that is done, move on to the next light. It is important the focus be efficient because there is rarely as much time as the designer and electrics team would like.

Lighting Break Down

The lighting breakdown indicates anything in the script that would suggest things about what the stage lighting would be like. In a play with continuous action and no set changes such as "Box and Cox", the breakdown might be fairly simple.

Page	Lighting note
2	Interior room, early morning
6	Lights Fire (effect)
19	By this point it is 10:00

Obviously more complicated plays will have considerably more. You will note that the play starts first thing in the morning, yet by the end it is about 10 am. The lighting designer will have to adjust the light coming through the window so that the time change indicated is accomplished.

Cueing Session

The lighting designer, after watching rehearsals and working with the director will develop a list of every time the lighting changes in the production, and some idea what is to happen with each cue. A cue, in lighting terms, is where a lighting change happens, what changes and how long it takes for the change to occur. Each cue will be carefully planned as to where it happens in the script. With this plan, the designer will work with a programmer to record all the cues into the lighting desk. The lighting desk is a specialized computer that will control all the lights. Often a Stage Manager, or Assistant Stage Manager will be in the theatre with the designer and the programmer and a hand full of additional people. The additional people, under the direction of the Stage Manager, will stand on stage in the spots where the actors would normally stand. This allows the designer to see what the cues will look like on stage and make the technical rehearsals move faster.

Additional Materials

- Types of Stage Lights

CHAPTER 8: Costumes

Duties of the Costume Crew

The work of costumes in theatre can be divided into two separate groups. The first group, is the costume construction crew. These artisans are responsible from turning the Costume Designers renderings in to working costumes. More to our focus of this text is the costume crew for production. Perhaps the best resource for understanding this work is to watch the video under Additional materials called "A Day in the life of the dresser at the British theatre" The head of the production crew is called the Wardrobe Supervisor. In olden days this job was termed "Wardrobe Master" or "Wardrobe Mistress." The crew members are generally called Dressers.

The Wardrobe Supervisors supervises the dressers. He or she will also maintain a repair and cleaning schedule for all the costumes. The dressers report to the wardrobe supervisor, and generally focus on all costumes for specific groups of characters/actors. They will make sure that all the costumes are in show ready condition, including spot cleaning, pressing, and minor repair work. Dressers will assist performers with any unusual or difficult costumes. One of the other major issues for costume crew members

Quick Changes

Quick changes are becoming a major feature (or challenge) of modern productions. As theatre pieces become more film-like, or are done with smaller casts, there are increasing needs for quick changes. A quick change is when an actor has to do a major costume change in a very limited amount of time. Generally, there is not enough time for the actor to return to his or her dressing room, and the change has to happen just off-stage, or in some instances, even on-stage just behind the set. To happen effectively, quick changes take extensive preparation and rehearsal.

In preparation for the quick change, the dresser should have all the costume pieces that the actor will need to change into. In some cases, where time is especially tight, the dresser and prop crew will need to coordinate so that the actor's props can be brought to the place where he or she is changing. The costume pieces need to be prepared to make putting them on quickly possible. This includes any buttons, snaps or zippers that are required to be undone, to be undone, while any that can remain closed should do so. The dresser should also have a laundry basket to discard the costumes that the actor is removing. It is possible that an actor will be discarding a prop that was in a pocket or bag into the laundry basket, so it is important to keep a look out and return those props to the prop crew.

As the actor exits the stage, any large items should be taken from them by an appropriate cue member. The actor should proceed directly to the quick change area, unbuttoning, or removing any items that they can safely undo. Once they get to the booth, the dresser and the actor should work together according to the plan they rehearsed. After the change is complete, the dresser should give the actor one final look over to make sure everything is correct.

After the actor has moved back to the stage, the dresser should clean up after the change, hanging up the costumes, and preparing for the next change.

The costume designer and the wardrobe supervisor will have worked out the quick change details, and will run it with the actor and dresser several times. If either the actor or the dresser has some suggestions of how to make it faster, they should voice them. Of course, the final call of how to do it should be that of the costume designer.

To see some efficient quick changes, watch the videos linked in the additional materials section.

Costume Breakdown

To find quick changes, the costume designer relies on the costume breakdown. This breakdown also indicates what costumes are needed for each actor, and on what page they are referenced on. The process of doing the breakdown is the same as doing any of the breakdowns we have done already. Generally each character is listed along the top, with act/scene/page number as needed listed down the left side. This allows notes to be organized by characters and location.

BOX AND COX

Scene	Page	Character			Costume Notes		
		Box	**Cox**	**Mrs. B**	**Box**	**Cox**	**Mrs. B**
i	2		X	X		Dressed as a hatter. He does not wear his coat or hat, but does wear a dressing gown. His hair is very short	Landlady, Reserved attire. Dark dress, white appron
i	3		X	X		Tries on several hats Finishes getting attired (add coat)	

i	4		X	X		(NOTE: Mrs. B puts dressing gown in closet)	
ii	4	X		X	Dressed as a printer coming home from work. Basic suit, with a cap		
ii	5	x		x	Threatens to remove pants. Ask director if he will.		
iii	6	X	X				
iii	6	X	x				
iii	7	X	X	X			
iii	8	X	X	X	Gets pipe out of pocket		
iii	9	X	x				
iii	10	X	X				
iii	11	X	X				
iii	12	X	X				
iii	13	X	X				
iv	13	X	X	X			
iv	14	X	X			Takes dice out of pocket	
iv	15	X	X		Takes coin from pocket	takes coin from pocket	
iv	16	X	X	X			takes letter from pocket
iv	17	X	X				
iv	18	x	X	x			
iv	19	x	x	x			
iv	20	x	x	x			

You will notice that this includes who appears on each page. This provides information about costume changes if needed.

Additional Materials

- Day in the life of a dresser at a British theatre
- Anatomy of a Quick Change for “Mary Poppins”
- A group Quick Change from “Magic Flute”
- “Gentleman’s Guide to Murder” Tour Quick Changes
- Costumes, Props, and Scenery on Broadway’s “The 39 Steps”

CHAPTER 9: Sound

Types of Sound in Theatre

Sound is important part of any theatrical experience. It communicates with the audience, creates atmosphere, supports the script, and supports the performer.

Often the sound design is the first design element the audience will come in contact with. If there is to be preshow music or other sound playing as the audience enters, it is the responsibility of the sound designer to create and the sound technicians to play. Most live entertainment events begin with an admonishment to turn of cell phones and instructions on what to do in the case of an emergency. Generally, this is either a prerecorded announcement or performed live on an off-stage microphone. Even if the pre-show announcement is pre-recorded, most venues require that a live microphone be set up so that in the event of an emergency announcements can be made by trained personnel to the audience.

Once the show has begun, there are several tasks that must be accomplished by the sound design and the sound team. The first of these is helping create the mood or atmosphere for the show. Especially in shows that have several locations during the course of the play, the sound designer may create a soundscape to play behind a scene. For example, a scene in a desolate field may have the sounds of wind mixed with occasional sounds of wildlife. Another example would be a scene in a sports bar where crowd sounds, muted sports commentary, and clinking glasses may create the appropriate environmental sounds. In some plays, a complex mix of individual songs and other instrumental noises may create underscoring, similar to that of a movie.

Sometimes the script of play calls for specific sounds. These might be door bells, or gun shots. These are distinguished from environmental sounds, by the fact that they need to come at a specific moment in the script. Often times, sound designers will create a long loop of sound for an environmental sound. A loop simply means that when it gets to the end it will start over again. Loops are often designed to be seamless so that the audience won't notice it is the same sounds again. This does not work as well for the specific sounds called for in the script. The designer and sound crew will need to ensure that these sounds happen at just the right moment through the cuing process (see chapter 12).

The last category of sound in theatre is that sound that aids the performer. Often this work goes unnoticed by the audience, but would be detrimental if not executed very well at each performance. Most performances in large theatres use microphones and other sound equipment to amplify the voice of the performers. Some of these microphones are placed around the stage and auditorium and amplify the overall sound coming from the stage. Sometimes microphones that are attached to a wireless transmitter are attached to the performer's body. A wireless receiver, attached to the sound mixing console will allow the sound to be transmitted to the audience. In musicals, the musicians in the orchestra are also generally surrounded by microphones. The sound is often mixed with the performers before

being fed to the speakers in the audience. Sometimes the sound from the orchestra is actually being fed to speakers on the stage so that the cast can hear the instrumentalists better. Some theatres also find it necessary to feed the sound of the vocalists on stage into small speakers in the orchestra pit so that the musicians can hear them better. Many theatres also use their sound system to send a feed of what is happening on stage to the dressing rooms so that actors changing costume know how soon they need to be on-stage. The theatre may also send the sound on stage (often called show program) to the lobby of the theatre. This allows house staff and late arriving patrons to hear what is going on.

Ways of Creating Sound

In the theatre today, most sound effects, whether an environmental sound, underscoring, or specific sound cue (such as a door slam) are pre-recorded. Sound effect companies sell all sorts of individual sound effects that can be purchased and modified to fit the needs of the show. Some sound designers go out into the world and record sounds using portable recording devices and then edit those sounds to suit the needs of the show. Regardless of how it is gathered, pre-recorded sounds are generally played back by a specialized computer running special software. The software allows the sound team to carefully program how loud a sound is, what speakers it is played through, etc. All of these commands are recorded as "cues." At a specific point in the script, the stage manager will instruct the sound operator to execute the cue, and the sound will playback exactly the same as it has for every previous performance. Some smaller theatres may still use sound effects played back by CD. In those cases, the sound team must work together to take careful notes of how loud each sound should be, if it needs to fade at the beginning or at the end and what speakers it needs to play out of. All of that will need to be written into the sound cue sheet and set up individually for each cue.

Before computers and CDs, sound was created live in the theatre. Some productions will still use some of these techniques.

- Crash box: This is a wooden, metal or sometimes cardboard box filled with scrap metal, glass and other items. It is tipped over or dropped to create a crashing sound. An experienced crew member backstage can adjust the loudness or ferocity of the crash to match the onstage action.
- Cap guns/Blank guns: These are ways of having a gun prop on stage create the bang as the trigger is pulled. While certainly safer than a real gun, cap guns and blank guns can seriously injure or kill someone. All venues have special procedures for using on stage weapons, and the venue must be consulted before using these items.
- Door slams: These look like a miniature door from "Alice in Wonderland." They often have a working door knob, and possibly a working lock all built into a small frame (about ¼ of the size of a real door). When opened or shut offstage it gives the impression of a door being opened or shut. Again, an experienced sound technician can provide more variation from effect to effect using a prop such as this compared to a pre-recording.
- Door bells: A real set of door bells can be purchased at a hardware store and placed on stage instead of a prerecorded effect.

- Phone Ringers: Devices are made that will mimic the signal sent by the phone company to ring a land-line phone. This allows the real phone on stage to ring. Careful testing must be performed in advance. Many of these devices will cause the phone to ring even if the hand set has been picked up. Practice between the operator and the actor is essential to make it look real.

It should also be noted that in the "old days," it was not uncommon to have a musician or small ensemble of musicians to provide underscoring for a non-musical play. Today, that sound is almost always created via a prerecorded track played back for the audience.

Sound effects are typically cued by the stage manager via whatever cueing system is available in the theatre. In some cases, especially with crash boxes and door slams, the stage manager may call the standby, but the responsible crew member may be watching the action on stage to precisely time the effect with the actors. Some sound effects may be actually executed by the actors on stage. If the design team has created a prop gun that fires a blank or a cap, it may actually be fire when the actor pulls the trigger in the course of the stage action. In cases such as this, it is not uncommon for a backup sound effect to be ready to go in case something goes wrong on stage. This could include a back-up prop gun in the hands of a crew member in the wings that could be cued by the stage manager, or a prerecorded sound effect that could be played in the event of a problem.

Sound Breakdown

Much like the breakdowns that have already been done, these are organized by act, scene and page number. Additional information is needed about what the cue is, and how it is created (live sound, playback etc.). Atmospheric sounds and underscoring are often created to be longer than they need to be, with the intention that they will fade out at a specific moment in the scene. This fade out is itself a sound cue, since it will need to be called by the stage manager and rehearsed with the cast and crew.

Take a look at this sound breakdown for "Box and Cox"

BOX AND COX

Scene	Page	Sound
i	2	Preshow Music (Pre Record)
i	2	Preshow Music Fade/Pre Show Announcement (Pre Record)
i	2	Knock on Door (Possibly live)
ii	4	Off stage voices (Possibly live)
ii	6	Fire crackle (Pre Record)
ii	6	Sound of bacon frying (Pre Record)

iii	6	Fade bacon frying
iii	6	Sound of pork chop frying (Pre Record)
iii	6	Fade pork chop
iii	6	Sound of bacon frying (Pre Record)
iii	7	Fade bacon frying
iv	18	Knock on the street door (Pre Record)
iv	19	Clock strikes 10 as an Ominbus passes (Pre Record)
iv	20	Bow Music(Pre Record)
iv	20	Bow Music fades / Post Show music (Plays out) (Pre Record)

Sound Cue Sheet

BOX AND COX

Cue	**Level**	**Sound**	NOTE
A		Preshow Music	
B		Preshow Music Fade/Pre Show Announcement	
C		Knock on Door (Back up)	Safety in case cast is late
D		Off stage voices (Back up)	Safety in case cast is late
E		Fire crackle	
F		Sound of bacon frying	
G		Fade bacon frying	
H		Sound of pork chop frying	
I		Fade pork chop	
J		Sound of bacon frying	
K		Fade bacon frying	
L		Knock on the street door	
M		Clock strikes 10 as an Ominbus passes	
N		Fade Fire/ Bow Music	

O		Bow Music fades / Post Show music	

While lighting cues are typically executed by the board operator by just pressing the go button, many shows have sound cues that are more complicated. Sound is still often a mix of sources and playback methods which may require more than simply pressing a go button. When creating a sound cue sheet, it is important to remember that the operators are probably using the sheet in dim lighting during the stress of a show. Consider simplicity and clarity as the guiding principles. If the sound levels are not preprogrammed, a space will be needed for the operator to write the information down during technical rehearsals.

Note how the sound designer decided to build back up prerecorded sounds for the live sounds on stage. Also note how in the final cue sheet, the designer notes that the fire sounds need to fade out.

Additional Materials

- Designing Sound for Theatre at the National Theatre
- Sound Engineering

Chapter 10: Blocking Notation

What is Block Notation?

Blocking is the term for where actors are standing and what business they are doing for every moment they are on stage. Blocking notation is the documentation of the blocking. In a rehearsal room, the director will explain the action to the actors and the stage manager will take it down. The blocking is recorded in the prompt script, or prompt book. This notation becomes exceedingly important for several tasks on the show.

In long running professional productions, it is not the director's job to train replacement performers and understudies. In the United States, this task is part of the stage management team's responsibilities. The notation must be complete enough that new actors will be able to recreate the original direction.

In a similar vein, it is important to understand that the prompt script is owned by the producer. The producer can (with the payment of royalties to the original artistic staff), recreate a production. This might be for a national tour, production in a foreign country, or a revival production. In any case, the producer will use the original prompt book to recreate the staging.

A more immediate need of the blocking notation deals with the design team. Scenic, Costume, and especially Lighting designers may need to ask detailed questions about staging that the stage manager will only be able to answer with the aid of the blocking notation in the prompt book. A member of the stage management team is always in the room while directors are working with actors. Design team members are rarely present. Scenic designers may ask for details of how many people stand on a table to determine how strong it needs to be. Costume designers may ask for details of what type of action occurs in a particular costume. Lighting designers are regularly asking the stage management team where on stage a particular moment happens so that lighting can be adjusted correctly.

Preparing a script

Stage managers prepare a prompt script to take blocking notation in a specific way. First step is to photo copy the script single sided. This allows the stage manager to create more white space around the text to make notations. It also allows the original script to remain unmarked. On the blank back of each page of the copy the stage manager will copy the ground plan. This allows stage managers to lay out their book so they see one page of text and one page of ground plan. The side with the ground plan looks like this:

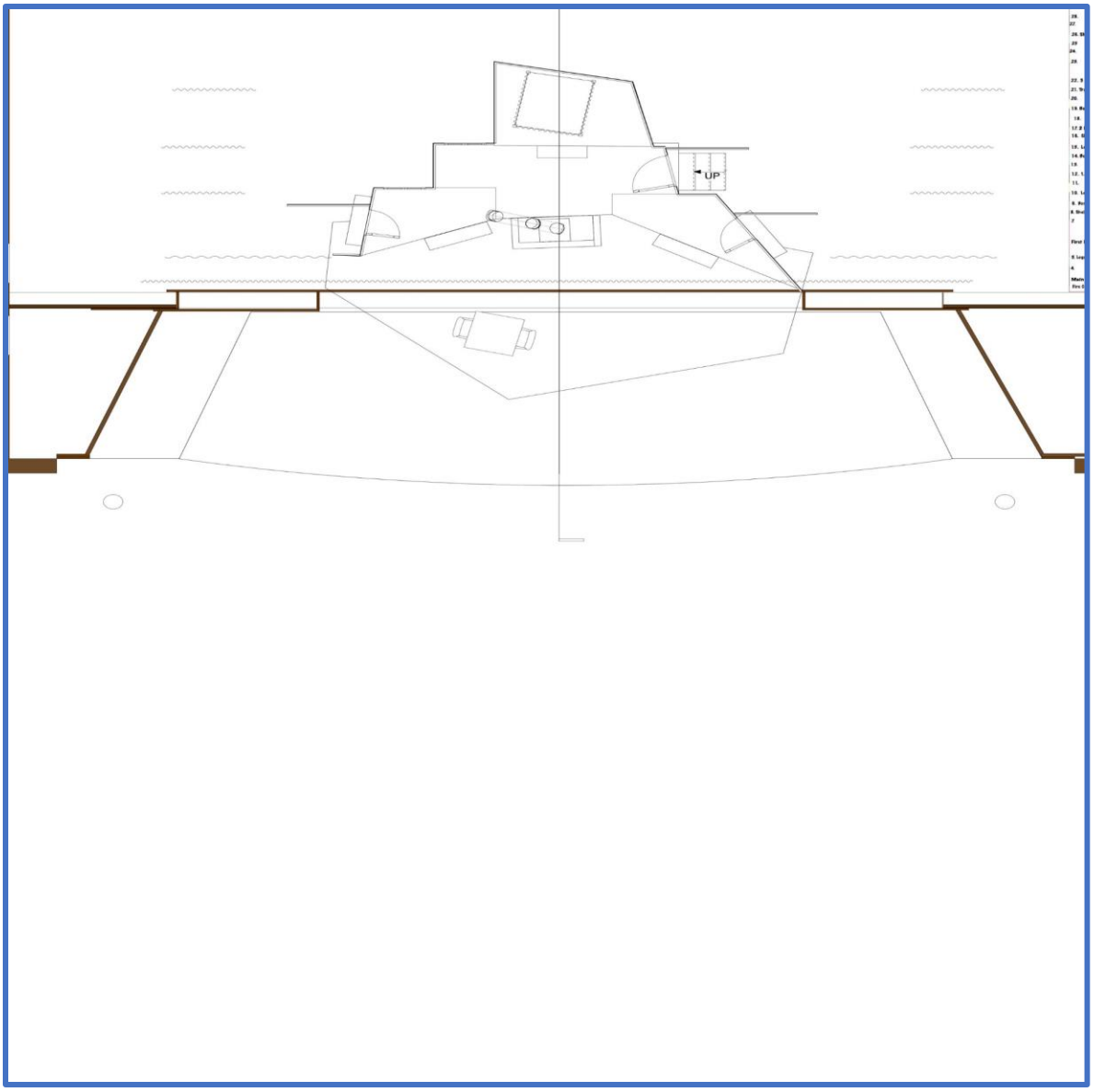


Figure 1. Ground Plan featuring blank space for stage managers notes.

Notice how the plan is small at the top of the page allowing room underneath the plan for the stage manager to take notes. Traditionally, it is set up to the text will be on the right side page, and the picture will be on the left side page. Some stage managers find it easier, especially if they are right handed, to put the ground plan on the right hand page because it makes diagraming the blocking easier.

Notation Styles/Symbols

Every stage manager develops their own system of symbols to make the taking of blocking notation easier. These symbols create a kind of short hand. As they are unique to each individual stage manager, it is vital that a key be provided at the front of the script. Each

character must have a symbol so that notes can be taken quickly. This is often the first letter or the initials of the character with a box drawn around the initials to denote that it is a character. Complicated sets may number all the doors or entrances/exits so that they can be noted quickly. Below is a key for a production of Box and Cox. Notice how there is a quick sketch of a stage showing Stage Left (SL), Stage Right (SR), Down Center (DC) etc.

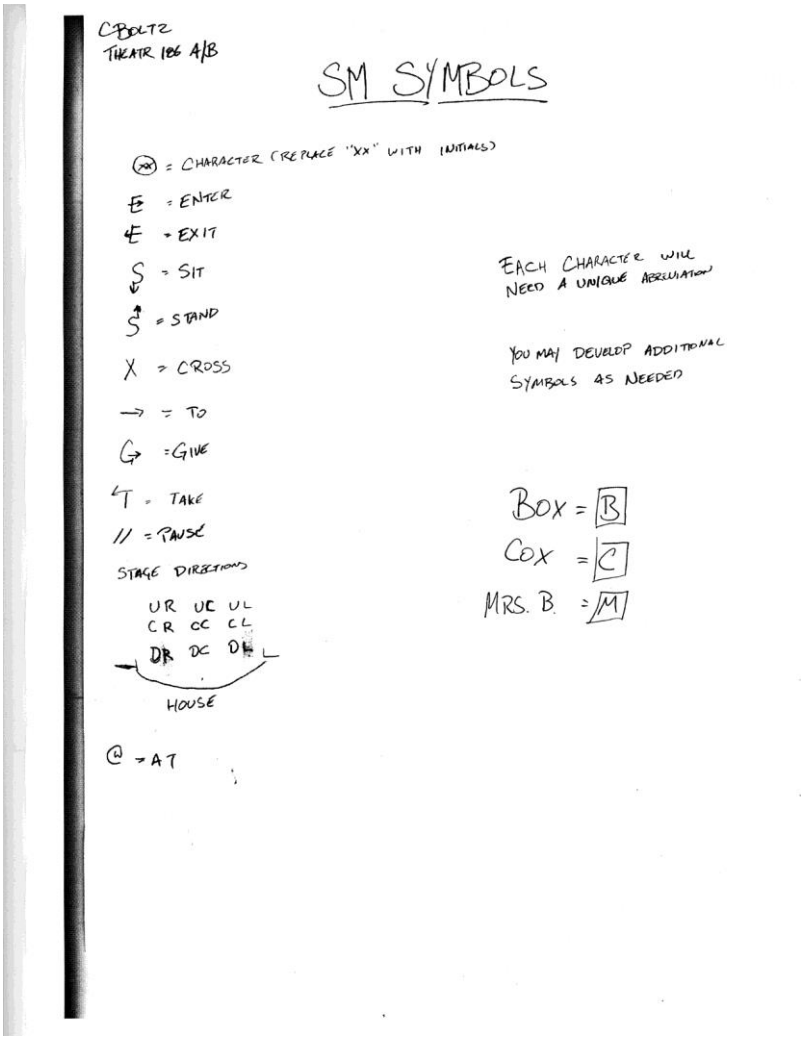


Figure 2. Stage Manager Symbols

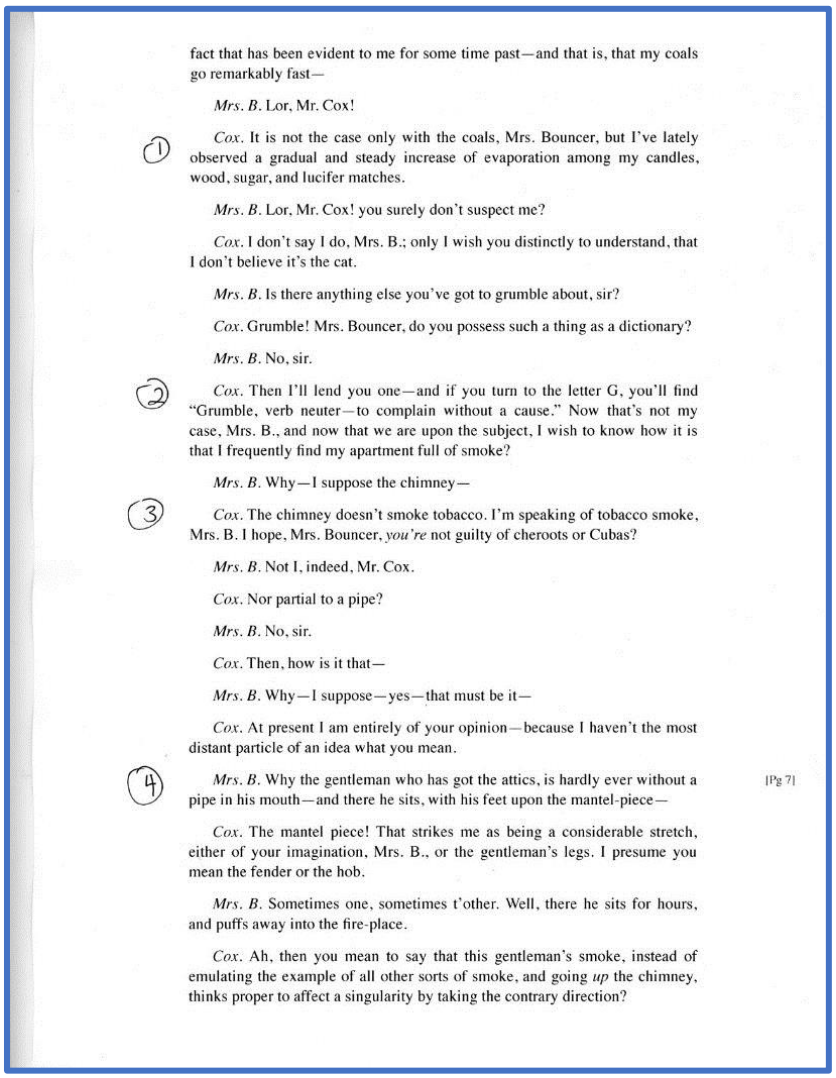
Each production will need to add or delete symbols from the above to be efficient for that show.

Coordinating Words and Actions

Once the script and initial key are prepared, it is time to observe rehearsals and take the blocking notation. Each place there is action in the text it is marked with a number. On the opposite page, each number coordinates with a written description of the action. The description is usually done with the symbols prepared above. The last step is to translate the descriptions into a visual representation on the ground plan at the top of the page.

On the ground plan, each character symbol is shown at their spot at the top of the page (or just off the stage if they will enter on the page). Then there moves are marked with arrows which can often who a clearer idea of the path the actors take than just the description. Each move is marked with a number the corresponds to the markings in the text. If a character doesn't move with a number, then that number is just skipped for that character. Even if a character doesn't more on a particular page (but appears on stage), they should be noted on the ground plan at the top of the page. This allows the stage manager to quickly know at a glance that everyone is where they are supposed to be during rehearsal.

A prepared page of Box and Cox might look like this:



fact that has been evident to me for some time past—and that is, that my coals go remarkably fast—

Mrs. B. Lor, Mr. Cox!

(1) *Cox.* It is not the case only with the coals, Mrs. Bouncer, but I've lately observed a gradual and steady increase of evaporation among my candles, wood, sugar, and lucifer matches.

Mrs. B. Lor, Mr. Cox! you surely don't suspect me?

Cox. I don't say I do, Mrs. B.; only I wish you distinctly to understand, that I don't believe it's the cat.

Mrs. B. Is there anything else you've got to grumble about, sir?

Cox. Grumble! Mrs. Bouncer, do you possess such a thing as a dictionary?

Mrs. B. No, sir.

(2) *Cox.* Then I'll lend you one—and if you turn to the letter G, you'll find "Grumble, verb neuter—to complain without a cause." Now that's not my case, Mrs. B., and now that we are upon the subject, I wish to know how it is that I frequently find my apartment full of smoke?

Mrs. B. Why—I suppose the chimney—

(3) *Cox.* The chimney doesn't smoke tobacco. I'm speaking of tobacco smoke, Mrs. B. I hope, Mrs. Bouncer, *you're* not guilty of cheroots or Cubas?

Mrs. B. Not I, indeed, Mr. Cox.

Cox. Nor partial to a pipe?

Mrs. B. No, sir.

Cox. Then, how is it that—

Mrs. B. Why—I suppose—yes—that must be it—

Cox. At present I am entirely of your opinion—because I haven't the most distant particle of an idea what you mean.

(4) *Mrs. B.* Why the gentleman who has got the attics, is hardly ever without a pipe in his mouth—and there he sits, with his feet upon the mantel-piece— [Pg 7]

Cox. The mantel piece! That strikes me as being a considerable stretch, either of your imagination, Mrs. B., or the gentleman's legs. I presume you mean the fender or the hob.

Mrs. B. Sometimes one, sometimes t'other. Well, there he sits for hours, and puffs away into the fire-place.

Cox. Ah, then you mean to say that this gentleman's smoke, instead of emulating the example of all other sorts of smoke, and going *up* the chimney, thinks proper to affect a singularity by taking the contrary direction?

Figure 3. Staged Managers Prepared page, a.

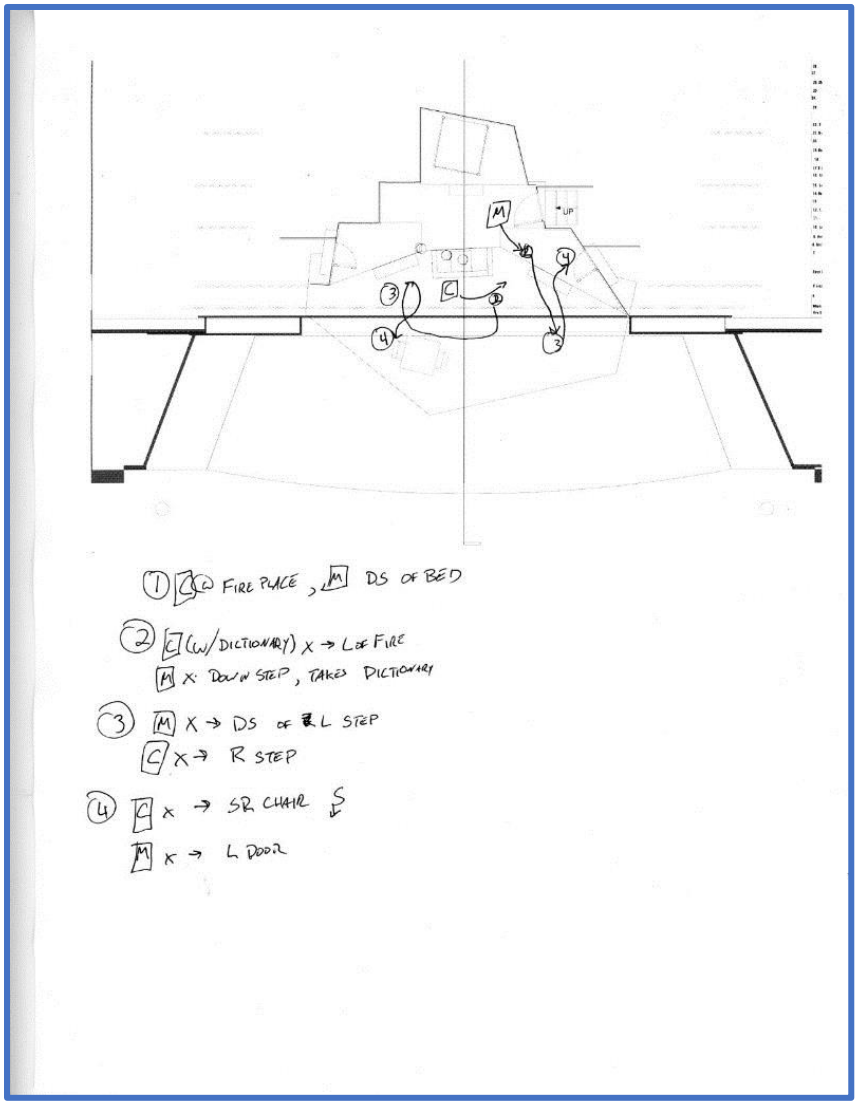


Figure 4. Staged Managers Prepared page, b.

Additional Reading

- [The Awesome Stage Manager Blog on Blocking Notation]

Chapter 11: Production Reports

Function and Distribution

As was noted previously, the director, stage manager and performers are the folks in the rehearsal room. Many others, such as producers, designers and technicians need to be kept abreast of what is happening in the rehearsal room. To accomplish this task, the rehearsal report. Rehearsal reports are distributed to the producers, and the entire creative team. In professional productions, the rehearsal report also serves as the time card for the actors, allowing them to be paid correctly.

For a performance, the stage manager, the performers, and the crew are the only people guaranteed to be there. Since directors, producers, and designers need to know about problems, issues etc. the performance report serves a similar purpose as the rehearsal report.

Traditionally these reports were generated, photocopied and hand distributed or faxed to the key personnel. Today they are more likely to be distributed via email. The email distribution has caused a change in how some reports are generated. Traditionally a form would be created and hand filled in by the stage manager at the rehearsal or performance. The next evolution was the form being created in a word processor and filled in on a lap top. The word processor version would need to be sent as an attachment in Email. Some productions feel it is better to just copy and paste the information into a body of an email instead of attaching a file. Whatever version the production team decides is best, the information on the report remains the same.

With so much information that will be eventually placed on the report, it is important that the layout is consistent from day to day. Although all production team members should read the report in its entirety, most will only look at the sections that directly pertain to their duties. With this in mind, if there are no notes or information for a particular department, that department still needs to be listed on the report, with a simple indication of “no notes.” Additionally, information that pertains to two or more departments (such as a particular prop needing to fit into a pocket of a costume) needs to appear with the notes for each department (in the example props and costumes). One other note that is important to remember: these reports are widely distributed. Some information, especially that of a sensitive nature about a cast member, should not appear on a production report. If that information needs to be shared, it should be shared via a separate email to the key people that need it, or over the phone.

Rehearsal Reports

As stated above, each production will develop its own report structure and lay out. Regardless, the following information needs to be on every report:

- Header

    - Including the production name, date of rehearsal, name of the stage manager who prepared the report.
- Schedule/Agenda
    - Detailing what the plan was for the rehearsals.
    - Notes of the actual start, end and break times. These are important for payroll.
- Cast/Crew called. This is who was expected to be at the rehearsal.
- Late/Absent cast or crew. People who are not there for the full call time are often paid less than those were.
- Accomplishments. This is a list of what items were rehearsed. This differs from the Agenda which discusses what was planned.
- Next Rehearsal: Call time/location of the next rehearsal and what is planned for that rehearsal
- NOTES: The notes are broken down by department. Depending on the organizational structure of a particular production there may be some additional departments, or some listed departments may be merged together.
    - General Notes: These are notes to everyone reading the production report. Some stage managers list weather conditions, positive information (cast member birthdays) or an overall assessment of the mood of the cast.
    - Accidents/Incidents: These include injuries or other unforeseen problems of a general nature. (i.e. rehearsal interrupted by a fire alarm, or the inability to unlock the door).
    - Scenery
    - Props
    - Costumes
    - Hair/Make-up
    - Sound
    - Lighting
    - Projection
    - Fight/Choreography/Other specialty staging
    - Producer/Marketing/Publicity
- Distribution: Many stage managers put a complete distribution list at the bottom of the report. This allows individuals to know who will read the report.

Performance Reports

Performance reports function very similarly to rehearsal reports, except that they are more focused on what happened at each performance. The format must be consistent from performance to performance.

- Header: including the name of the show, the scheduled date and time of the performance, name and contact information for the stage manager preparing the report
- Schedule including call times for cast and crew, the start and end times of each act, the overall run time of the show (from start until the conclusion of bows)
- Cast and crew called for the performance

- Late/absent cast and crew. This is also the area to note if understudies were used for the performance
- Next Rehearsal (if one is called), location, cast and crew that are called, what will be rehearsed
- Next Performance (date/time, and if the show is a tour list the location)
- NOTES
    - General notes: Overall assessment of the performance/audience response
    - House: How many people were in the audience (The house manager will provide this information), any issues getting the audience in or out, and injuries or accidents involving the audience
    - Incidents/Accidents: Any unusual incidents that apply to all production team members (starting late due to fire trucks being called for the building across the street), accidents or injuries involving the cast and crew
    - Scenery
    - Props
    - Costumes
    - Hair/Make Up
    - Lighting
    - Sound
    - Projection
    - Producer/Marketing/Publicity
- Distribution list.

Items such as issues with the house are important for the producer to be aware of. The run time of the show often gives directors a good idea if the show is being performed as directed. Professional productions generally vary less than 2 minutes between performances. Anything that might cause a huge shift in the run time should be noted.

Additional Reading

- Headset Chatter website on Stage Management forms (including Rehearsal and Performance Reports)

Chapter 12: Cueing Scripts

Calling the Show

One of the primary functions of the stage manager is calling the cues for the show. All the technicians will wait to execute all of their lighting, sound, fly, deck and other cues until the stage manager instructs them to.

At a process known as "paper tech," the stage manager will talk through all the cues with the designers and the director. Each cue will be discussed and named. Lighting cues are generally numbered as light boards work by number. Sound cues are typically lettered to differentiate them from the lighting cues. With today's technology, however each designer will discuss how they want the cues designated. The director and designers will make best guesses where each cue will be called in the script and a short concept of what each cue will be. These discussions will make technical rehearsals more efficiently, as there will be less changes. Even so, all cues should be marked in pencil because they may move during the technical rehearsals

Preparing the Script

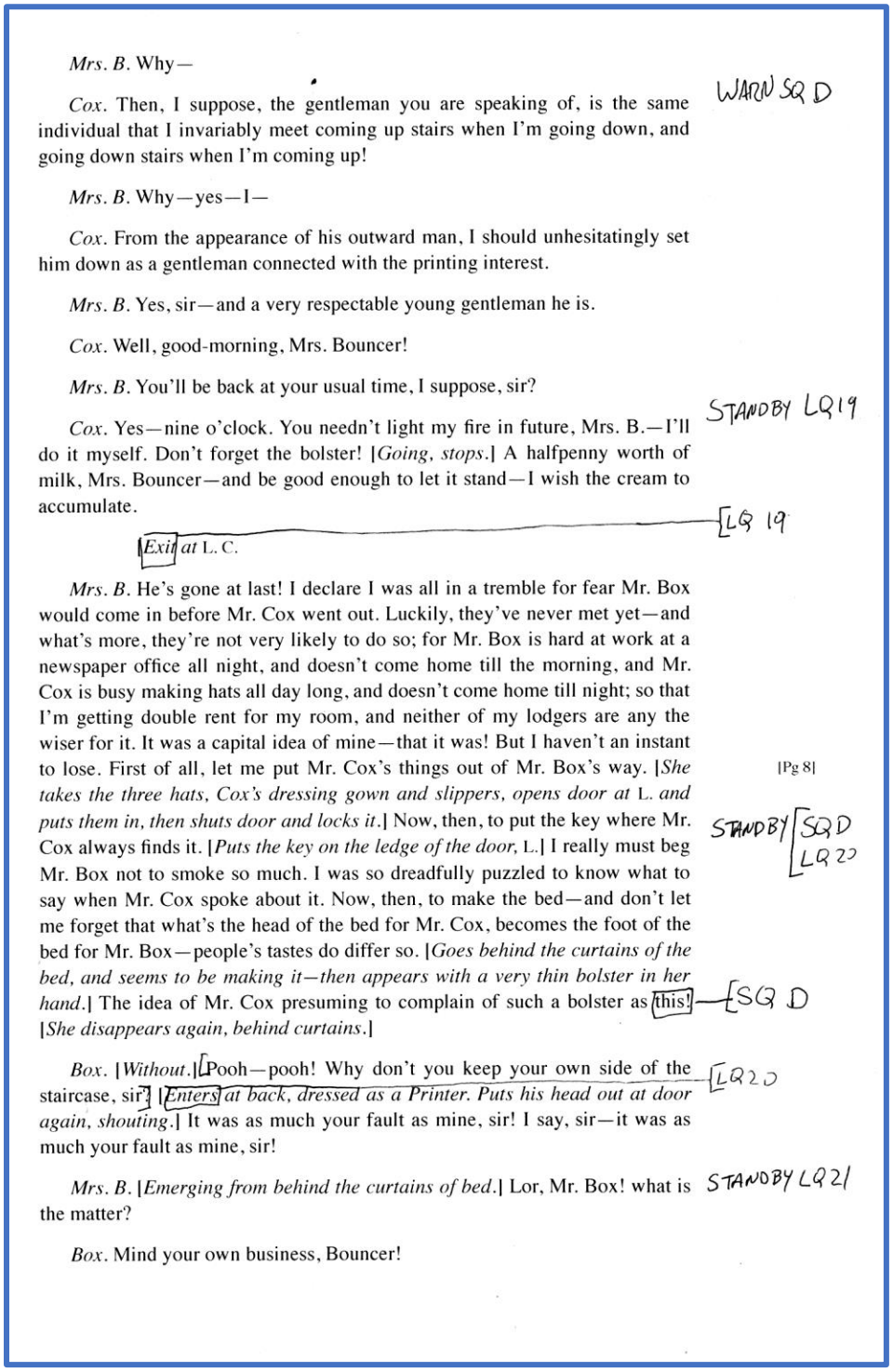
Frequently, the stage manager will continue to use the blocking script, but using the outside edge of the page with the text to mark the cues. If the stage manager chooses to use a clean script, they can, but it is generally prepared the same way, i.e. copying the script on to 8 ½" by 11" paper.

It is important that there be plenty of room as some shows involve many cues for the stage manager to call. If there have been any additions or deletions of text or stage business, these must be clearly marked in the script, because it is possible that a designer will place a cue on the additional text or action.

Marking the Script

The cueing script is marked with three types of calls: Warnings, Stand-bys and Cues. A warning is a call to let certain technicians know that we are approaching the time a cue will happen. These are generally needed when a technician has not had a cue for several pages, or when a technician has a particularly challenging cue sequence to execute. The warning gives the technician time to prepare. A Stand-by means that the cue will be called imminently. Technicians at this point are fully ready to execute the cue on a moment's notice. Warnings and Stand-bys are placed generally in the script as their calling does not need to be precise. The cues on the other hand are marked on a specific word or action. It is on this word or action that the "Go" for the cue needs to be called. Sometimes two cues may happen at the same time, or they may happen separately. If together the stage manager will say "Light 15 and Sound D … GO." If they are to happen independently, but near to each other the stage manager will say "Lights 15 … GO, Sound D … GO."

Stage manager often indicate the types of cue (such as light cue or sound cue) with the cue name. The cue types are often abbreviated: SQ for sound cue, LQ for light cue etc. Look at the sample cue page on the next page.



Mrs. B. Why—

WARN SQ D

Cox. Then, I suppose, the gentleman you are speaking of, is the same individual that I invariably meet coming up stairs when I'm going down, and going down stairs when I'm coming up!

Mrs. B. Why—yes—I—

Cox. From the appearance of his outward man, I should unhesitatingly set him down as a gentleman connected with the printing interest.

Mrs. B. Yes, sir—and a very respectable young gentleman he is.

Cox. Well, good-morning, Mrs. Bouncer!

Mrs. B. You'll be back at your usual time, I suppose, sir?

STANDBY LQ19

Cox. Yes—nine o'clock. You needn't light my fire in future, Mrs. B.—I'll do it myself. Don't forget the bolster! [*Going, stops.*] A halfpenny worth of milk, Mrs. Bouncer—and be good enough to let it stand—I wish the cream to accumulate.

[LQ 19

[*Exit at* L. C.

Mrs. B. He's gone at last! I declare I was all in a tremble for fear Mr. Box would come in before Mr. Cox went out. Luckily, they've never met yet—and what's more, they're not very likely to do so; for Mr. Box is hard at work at a newspaper office all night, and doesn't come home till the morning, and Mr. Cox is busy making hats all day long, and doesn't come home till night; so that I'm getting double rent for my room, and neither of my lodgers are any the wiser for it. It was a capital idea of mine—that it was! But I haven't an instant to lose. First of all, let me put Mr. Cox's things out of Mr. Box's way. [*She takes the three hats, Cox's dressing gown and slippers, opens door at* L. *and puts them in, then shuts door and locks it.*] Now, then, to put the key where Mr. Cox always finds it. [*Puts the key on the ledge of the door,* L.] I really must beg Mr. Box not to smoke so much. I was so dreadfully puzzled to know what to say when Mr. Cox spoke about it. Now, then, to make the bed—and don't let me forget that what's the head of the bed for Mr. Cox, becomes the foot of the bed for Mr. Box—people's tastes do differ so. [*Goes behind the curtains of the bed, and seems to be making it—then appears with a very thin bolster in her hand.*] The idea of Mr. Cox presuming to complain of such a bolster as this! [*She disappears again, behind curtains.*]

[Pg 8]

STANDBY [SQ D
LQ 20

[SQ D

Box. [*Without.*] Pooh—pooh! Why don't you keep your own side of the staircase, sir? [*Enters at back, dressed as a Printer. Puts his head out at door again, shouting.*] It was as much your fault as mine, sir! I say, sir—it was as much your fault as mine, sir!

[LQ 20

Mrs. B. [*Emerging from behind the curtains of bed.*] Lor, Mr. Box! what is the matter?

STANDBY LQ 21

Box. Mind your own business, Bouncer!

In the example on the previous page, we see that the stage manager plans to call the Stand-bys for D and 20 together, even though the two cues will actually called separately. Light cues 19 and 20 are called on specific actions, while sound cue D is called on the word "this." It is important to notate all stand-bys and warnings be noted in the script, that way the stage manager won't forget to call them.

Additional Reading

- Theatre Crafts on Cue Scripts
- Hear a San Diego stage manager calling cues for "Hairspray"