**Theater**

**Theater Production**, the various means by which any of the forms of theater are presented to a live audience. The term *theater* is often applied only to dramatic and musical plays, but it properly includes opera, dance, circus and carnivals, mime, vaudeville, puppet shows, pageants, and other forms—all of which have certain elements in common. They are essentially visual; are experienced directly (although film, videotapes, or recorded sound may be incorporated into a performance); and are governed by sets of rules—such as scripts, scenarios, scores, or choreography—that determine the language and actions of the performers; language, action or atmosphere may be contrived, in order to elicit emotional responses from the audience.

**Functions and Characteristics of Theater**

 Ever since Aristotle discussed the origin and function of theater in his famous treatise Poetics (circa 330 BC), the purpose and characteristics of theater have been widely debated. Over the centuries, theater has been used—apart from purely artistic expression—for entertainment, religious ritual, moral teaching, political persuasion, and to alter consciousness. It has ranged from realistic storytelling to the presentation of abstract sound and movement. Theater production involves the use of sets and props, lighting, costumes, and makeup or masks, as well as a space for performance (the stage) and a space for the audience (the auditorium), although these may overlap, especially in later 20th-century productions. Theater, then, is an amalgamation of art and architecture; literature, music, and dance; and technology. The most rudimentary performances may depend on found space and objects and be the work of a single performer. Most performances, however, require the cooperative efforts of many creative and technically trained people to form, ideally, a harmonious ensemble.

**Presentational and Representational Theater**

Approaches to the presentation of drama vary from one generation to the next and across cultures, but most can be categorized roughly either as presentational or representational. Most African, Oriental, pre-Renaissance Western, and 20th-century avant-garde theater is presentational. The stylized approach of presentational theater makes no attempt to hide its theatricality and often emphasizes it. Thus, the German playwright and theoretician Bertolt Brecht advocated exposing the lighting instruments and stage machinery so that the audience would be reminded constantly that it was viewing a play.

Representational theater, on the other hand, is illusionistic. Most Western theater since the Renaissance has been essentially representational: Plays have had plausible plots, characters have seemed true to life, scenery has tended toward, or been suggestive of, the realistic.

Most performances do not, of course, fall neatly into one or the other category but may contain elements of each. The plays of the American dramatist Tennessee Williams, for example, are rooted in psychological realism but often employ dream sequences, symbolic characters and objects, and poetic language.

***Types of Modern Western Theater***

Aside from aesthetic intention, Western theater can also be classified in terms of economics and of approaches to production, categorized as subsidized, commercial, noncommercial—frequently called experimental or art theater—community, and academic theater.

**Subsidized Theater**

Subsidized theater is financially underwritten by a government or by a philanthropic organization. Because of the considerable expense of mounting a theatrical production, the limited audience capacity of most theaters, and, often, the limited appeal of much theater to the population as a whole, many theaters can only remain financially solvent and mount quality productions with subsidies to supplement box-office income.

Most countries have a designated national theater company supported by the state. In Great Britain and Germany, for example, most cities or regions have subsidized companies as well. In Communist countries virtually all theater is state-supported; often this allows more elaborate design, technology, and experimentation than in Western European and U.S. theater. Until recently, considerable government support was available for the arts in the U.S., especially for regional theaters—permanent professional companies located in major cities that often present performers in rotating repertory, such as the Tyrone Guthrie Theater in Minneapolis, Minnesota, and the Arena Stage in Washington, D.C. The amount of government support to the American theater, however, has always been far less than that given to its European counterpart, and it is increasingly dependent on the unpredictable generosity of philanthropic foundations. This situation, largely caused by the very size and diversity of the U.S. and of its audience, also reflects current government cutbacks. Other important reasons are the lack of a single dominant cultural center such as London or Paris and the lack of a strong theatrical heritage.

**Commercial Theater**

 Commercial theater appeals to a large audience and is produced with the intention of making a profit. The basis of commercial theater is entertainment; social relevance and artistic and literary merit are secondary considerations. In the U.S. and Canada, commercial theater is centered in New York City’s Broadway theater district; almost every major city in the world has an equivalent—London’s West End, for example. Before opening in New York, many shows hold tryouts in other cities—preview performances to work out difficulties or to test audience response. If a show is successful in New York, road companies will tour other cities. These companies may range from the original cast playing extended runs in large cities to “bus and truck” tours (so called because of their method of traveling and transporting cast and scenery) with little-known actors playing one-night stands in small cities. Road companies were once common, but today only hit shows tend to tour. Commercial theater also includes dinner theater and summer stock.

In 1980 a typical Broadway drama or comedy cost approximately $500,000 to produce, a musical about $1 million. Such high initial costs, plus the weekly operating costs (theater rent, salaries, royalties, publicity, insurance, equipment maintenance, and the like) may cause a show to take several years to pay off its debts and begin to make a profit. Sometimes only the lucrative sale of movie rights puts a production in the black. Because of such economics, Broadway producers seldom take risks with unknown playwrights or unusual plays. Although the economics were not so harsh before World War II, commercial theater has always been inherently conservative and inhospitable to experimentation.

**Noncommercial Theater**

Attempts to circumvent the economics peculiar to commercial theater since the end of the 19th century have resulted in the evolution of noncommercial theater. Known as art theater in Europe and America before World War I, and later as experimental theater, it is often identified today in New York City as Off Broadway and Off-Off-Broadway (the latter being a reaction to the increasing commercialism of the former), in England as fringe theater, and elsewhere by a host of other names. The various goals of such theater include presenting more serious, literary, politically active, artistic, and avant-garde drama; experimenting with new forms of production, acting, and design; and giving voice to new playwrights, actors, and directors.

Noncommercial theater tends to operate on limited budgets, to make lack of resources a virtue, and to be unconcerned with profit. It tends to believe strongly in specific ideals and often disavows the so-called slickness associated with commercial theater. Noncommercial theater tries to survive on box-office income and donations, but in recent years it has become increasingly dependent on federal and private subsidy. Those companies that cannot obtain adequate funding are usually faced with bankruptcy after a short time or else are forced to compromise their ideals to survive. In fact, those that do survive almost become as commercial as the theater they once rebelled against. This has been a repeating pattern in 20th-century theater history.

**Community and Academic Theater**

Community theater is generally nonprofessional, consisting of members of a community who practice theater as an avocation. The repertoire of community theater tends to be commercial fare, although this may vary. Academic theater, as the name suggests, is produced by educational institutions, most often colleges and universities. The educational purpose of such theater results in a repertoire often weighted toward the classical and experimental. Some colleges have technical facilities that surpass those of commercial theaters. Academic theater is far more active in the U.S. than elsewhere; with over 5000 productions a year, it is responsible for more theater than all other American forms combined.

***Theater Space***

Theater can also be discussed in terms of the type of space in which it is produced. Stages and auditoriums have had distinctive forms in every era and in different cultures. New theaters today tend to be flexible and eclectic in design, incorporating elements of several styles; they are known as multiple-use or multiple-form theaters.

 A performance, however, need not occur in an architectural structure designed as a theater, or even in a building. The English director Peter Brook talks of creating theater in an “empty space.” Many earlier forms of theater were performed in the streets, open spaces, market squares, churches, or rooms or buildings not intended for use as theaters. Much contemporary experimental theater rejects the formal constraints of available theaters and seeks more unusual spaces. In all these “found” theaters, the sense of stage and auditorium is created by the actions of the performers and the natural features of the space.

Throughout history, however, most theaters have employed one of three types of stage: end, thrust, and arena. An end stage is a raised platform facing the assembled audience. Frequently, it is placed at one end of a rectangular space. The simplest version of the end stage is the booth or trestle stage, a raised stage with a curtained backdrop and perhaps an awning. This was the stage of the Greek and Roman mimes, the mountebanks and wandering entertainers of the Middle Ages, commedia dell’arte, and popular entertainers into the 20th century. It probably formed the basis of Greek tragic theater and Elizabethan theater as well.

**The Proscenium Theater**

Since the Renaissance, Western theater has been dominated by an end stage variant called the proscenium theater. The proscenium is the wall separating the stage from the auditorium. The proscenium arch, which may take several shapes, is the opening in that wall through which the audience views the performance. A curtain that either rises or opens to the sides may hang in this space. The proscenium developed in response to the desire to mask scenery, hide scene-changing machinery, and create an offstage space for performers’ exits and entrances. The result is to enhance illusion by eliminating all that is not part of the scene and to encourage the audience to imagine that what they cannot see is a continuation of what they can see. Because the proscenium is (or appears to be) an architectural barrier, it creates a sense of distance or separation between the stage and the spectators. The proscenium arch also frames the stage and consequently is often called a peep-show or picture-frame stage.

**The Thrust Stage**

A thrust stage, sometimes known as three-quarter round, is a platform surrounded on three sides by the audience. This form was used for ancient Greek theater, Elizabethan theater, classical Spanish theater, English Restoration theater, Japanese and Chinese classical theater, and much of Western theater in the 20th century. A thrust may be backed by a wall or be appended to some sort of end stage. The upstage end (back of the stage, farthest from the audience) may have scenery and provisions for entrances and exits, but the thrust itself is usually bare except for a few scenic elements and props. Because no barrier exists between performers and spectators, the thrust stage generally creates a sense of greater intimacy, as if the performance were occurring in the midst of the auditorium, while still allowing for illusionistic effects through the use of the upstage end and adjacent offstage space.

**The Arena Stage**

The arena stage, or theater-in-the-round, is a performing space totally surrounded by the auditorium. This arrangement has been tried several times in the 20th century, but its historical precedents are largely in nondramatic forms such as the circus, and it has limited popularity. The necessity of providing equal sight lines for all spectators puts special constraints on the type of scenery used and on the movements of the actors, because at any given time part of the audience will inevitably be viewing a performer’s back. Illusion is more difficult to sustain in arena, since in most setups, entrances and exits must be made in full view of the audience, eliminating surprise, if nothing else. Nonetheless, arena, when properly used, can create a sense of intimacy not often possible with other stage arrangements, and, as noted, it is well suited to many nondramatic forms. Furthermore, because of the different scenic demands of arena theater, the large backstage areas associated with prosceniums can be eliminated, thus allowing a more economical use of space.

**Variant Forms**

One variant form of staging is environmental theater, which has precedents in medieval and folk theater and has been widely used in 20th-century avant-garde theater. It eliminates the single or central stage in favor of surrounding the spectators or sharing the space with them. Stage space and spectator space become indistinguishable. Another popular alternative is the free, or flexible, space, sometimes called a black-box theater because of its most common shape and color. This is an empty space with movable seating units and stage platforms that can be arranged in any configuration for each performance.

**The Fixed Architectural Stage**

 Most stages are raw spaces that the designer can mold to create any desired effect or location; in contrast, the architectural stage has permanent features that create a more formal scenic effect. Typically, ramps, stairs, platforms, archways, and pillars are permanently built into the stage space. Variety in individual settings may be achieved by adding scenic elements. The Stratford Festival Theater in Stratford, Ontario, for example, has a permanent “inner stage”—a platform roughly 3.6 m (12 ft) high—jutting onto the multilevel thrust stage from the upstage wall. Most permanent theaters through the Renaissance, such as the Teatro Olimpico (1580) in Vicenza, Italy, did not use painted or built scenery but relied on similar permanent architectural features that could provide the necessary scenic elements. The No and kabuki stages in Japan are other examples.

**Auditoriums**

Auditoriums in the 20th century are mostly variants on the fan-shaped auditorium built (1876) by the composer Richard Wagner at his famous opera house in Bayreuth, Germany. These auditoriums are shaped like a hand-held fan and are usually raked (inclined upward from front to back), with staggered seats to provide unobstructed sight lines. Such auditoriums may be designed with balconies, and some theaters, such as opera houses, have boxes—seats in open or partitioned sections along the sidewalls of the auditorium—a carry-over from baroque theater architecture.

***The Theater Staff***

Regardless of the type or complexity of a production, all theater performances have similar requirements. For a small, noncommercial production, most of these requirements may be met by two or three people; a Broadway show requires dozens; certain opera companies employ several hundred. The staff may be divided into administrative, creative (or artistic), and technical personnel.

The administrative group includes the producer, box-office and publicity personnel, and front-of-house staff (house manager, ushers, and others responsible for the audience). The artistic staff consists of the director, designers, performers, and, if applicable, playwright, composer, librettist, choreographer, and musical director. Technical personnel include the stage manager, technical director, and various construction and running crews, all working backstage.

**Producer**

The producer is responsible for the overall administration—raising and allocating funds, hiring personnel, and overseeing all aspects of production. Large productions may have several producers designated as executive, associate, or coproducers, each of whom may be responsible for a specific aspect of the show. Someone may be listed as a producer by virtue of the amount of money invested. An organization can be a producer, as was the Theatre Guild, a group responsible for some of the most important productions on Broadway from the 1920s to the ’40s. In such arrangements, of course, individual members of the organization still supervise.

For a new commercial production, the producer contracts with a playwright for a script; raises funds from private investors called “angels” (who may invest after seeing a fragment of the play at a special staging known as a backer’s audition); hires the artistic and technical staffs; rents a theater and all the necessary equipment for the stage; and oversees publicity, ticket sales, and all the financial aspects of the production. Box-office operations are handled by a general manager. In theater companies that do repertoire, a season of several plays, the producer may be responsible for selecting the repertoire, although this is often the task of the artistic director. The producer also arranges tours, subsidiary productions, and the sale of subsidiary rights, including film, television, and amateur production rights. Most theaters also have a theater or house manager, responsible for theater maintenance and audience control.

**Director**

 The director makes all artistic or creative decisions and is responsible for the harmonious unity of a production. The director, usually in conjunction with the designers (and perhaps the producer), determines a concept, motif, or interpretation for the script or scenario; selects a cast, rehearses them; and usually has a deciding role in scenery, costumes, lights, and sound. Movement, timing, pacing, and visual and aural effects are all determined by the director; what the audience finally sees is the director’s vision. From the time of the ancient Greeks until the 17th century this role was generally fulfilled by the playwright, and from the 17th to the end of the 19th century directing was the function of the leading actor of a company. Under such conditions, however, ensemble performance was rare.

The concept of the modern director can be traced to the 18th-century English actor-manager David Garrick, although George II, duke of the German principality of Saxe-Meiningen, is generally referred to as the first director; touring Europe with his theater company in the 1870s and ’80s, he exercised absolute control over all aspects of production. In the 20th century there has been a recurring tendency for directors to use a script simply as a starting point for their own theatrical visions, resulting in unorthodox and frequently spectacular productions often called “theatricalist.” Such productions often achieve clarification or emphasis of themes or images in the text, or a new relevance for classic scripts, sometimes—admittedly—at the expense of the integrity of the original. Some notable directors of this type were Vsevolod Meyerhold, Max Reinhardt, Jean Louis Barrault, and, more recently, Peter Brook, Peter Stein, and Tom O’Horgan.

The director usually selects the cast through auditions in which performers read sections of the script to be produced, present prepared scenes or speeches, or, when appropriate, sing and dance. The director of a musical production is aided in the auditioning process by the musical director and the choreographer. Although auditioning is acknowledged to be a flawed method, it does allow the director to judge the talents and qualities of potential performers. Actors may also be hired on the basis of reputation, recommendation of agents, or simply for physical appropriateness.

**Performers.**

 Acting implies impersonation, and most plays require the creation of complex characters with distinct physical and psychological attributes. In the broadest sense, however, a performer is someone who does something for an audience; thus, performing may range from executing simple tasks to displaying skill without impersonation, to believably re-creating historical or fictional characters, to exercising the virtuosic techniques of dancers and singers.

The director and cast of modern productions generally rehearse from two to six weeks, although certain European subsidized theaters have the luxury of several months’ rehearsal time, and certain types of Asian theater require several years of formal training (the *bunraku* puppet theater of Japan and the kathakali dance theater of India are notable examples). During rehearsals, blocking (the movement of the performers) is set, lines are learned, interpretations are determined, and performances are polished. If a new play is being rehearsed, the playwright is usually present to change lines and to rearrange, add, or delete scenes as necessary. In the case of musicals, songs and dances may be added or dropped; the choreographer rehearses the dancers, and the musical director rehearses the singers.

Most professional actors in the U.S. belong to Actors’ Equity Association, a labor union. Canada and Great Britain also have equity associations, and equivalent unions exist in other countries. Virtually all commercial theaters, most regional and dinner theaters, and many summer-stock theaters in the U.S. are union houses; therefore, they may hire only Equity actors except under special conditions. The union determines salaries, length of rehearsals, number of performances per week (normally eight), working conditions, and benefits. Although acting is often thought to be a lucrative profession, it is so for only a very few—the stars. Base salaries for actors and dancers are lower than in most other trade professions. Moreover, theater does not provide steady employment or job security. Of the more than 20,000 Equity members, some 85 percent are unemployed at any one time.

**Set Design**

 In Europe, one person, frequently called a scenographer, designs sets, costumes, and lights; in the U.S. these functions are usually handled by three separate professionals. Set design is the arrangement of theatrical space; the set, or setting, is the visual environment in which a play is performed. Its purpose is to suggest time and place and to create the proper mood or atmosphere. Settings can generally be classified as realistic, abstract, suggestive, or functional.

*Realistic*

A realistic setting tries to re-create a specific location. During the height of naturalism at the end of the 19th century, directors strove for total verisimilitude, leading to such practices as purchasing real meat to hang in a butcher-shop scene or transferring a complete restaurant onto a stage. The American producer-director David Belasco’s insistence on realistic sunset effects and the like led to significant improvements in lighting design and equipment early in the 20th century. But naturalism is also illusionism; such settings are designed to fool the audience. Walls of a stage set are usually not made of wood or plasterboard, as they would be in a real house, but are constructed from flats—panels of canvas stretched on wooden frames—supported from behind by stage braces. Flats are lightweight and thus easy to move and store, and they are reusable. Trees and rocks may be constructed from papier-mвchй; elaborate moldings are made from plastic; wallpaper, shadows, and inlaid woodwork are more often painted than real; false perspective may be painted or built into the set. The stage floor may be raked—inclined upward from the front of the stage (downstage) to the back (upstage)—and furniture appropriately adjusted to compensate for audience sight lines or the normal effects of perspective. The result is the illusion of a room, or park, or forest, but the reality may be a carefully distorted conglomeration of canvas, glue, and paint.

From the Renaissance to the mid-19th century, realistic settings generally consisted of a painted backdrop and wings—flats placed parallel to the front of the stage to help mask the offstage space, and often painted to enhance the scenic illusion. Some furniture or freestanding set pieces were sometimes placed on the stage, but generally it was an empty space for the actors. The settings were “stock,” consisting of an interior set, an exterior set, and variants that sufficed for all performances. Most interior scenes since the early 19th century have utilized a box set—a room from which the fourth wall (the one nearest the audience) has supposedly been removed, leaving a room with three walls, a ceiling, and three-dimensional furniture and decor. Such an arrangement posits the spectator as voyeur. In actuality, the setting is once again illusionistic; the arrangement of furniture and the positions and movements of actors are designed for audience convenience.

Even in the most realistically detailed setting, the designer still controls much of the setting’s effect through choice of colors, arrangement of props and set pieces (is the room sparsely furnished or cluttered, spacious or claustrophobic?), and placement of entrances. All this has a profound, albeit subtle, effect on the audience.

*Abstract*

The abstract setting, most popular in the early 20th century, was influenced largely by the Swiss designer Adolphe Appia and the English designer Edward Gordon Craig. The theories of these two men have influenced not only design in general but much contemporary theater. An abstract set does not depict any specific time or place. It most often consists of platforms, steps, drapes, panels, ramps, or other nonspecific elements. Most common in modern dance, abstract settings work best in productions in which time and place are unspecified or irrelevant, or in which the director and designer want to create a sense of timelessness and universality. This is common, for instance, in Shakespearean productions, in which locale may alter rapidly, is frequently not indicated by the script, and may be suggested adequately by a few props and by the poetry itself. Abstract settings place more emphasis on the language and the performer and stimulate the spectator’s imagination. Costuming thus becomes more significant, and lighting takes on great importance.

*Suggestive*

Most settings in today’s commercial theater are suggestive, descended from the so-called new stagecraft of the first half of the 20th century. Sometimes called simplified realism, its scenic effect is achieved by eliminating nonessential elements—an approach championed by the American designer Robert Edmond Jones—or by providing fragments of a realistic setting, perhaps in combination with abstract elements, such as a window frame suspended in front of black drapes. Universality and imagination are encouraged through the lack of detail; yet some specificity of time, place, and mood is achieved. Such sets may appear dreamlike, fragmentary, stark, or surrealistic.

*Functional*

Functional settings are derived from the requirements of the particular theatrical form. Although they are rarely used in dramatic presentations, they are essential to certain kinds of performance. An excellent example is the circus, the basic scenic elements of which are determined by the needs of the performers.

**Stage Facilities**

The use and movement of scenery are determined by stage facilities. Relatively standard elements include trapdoors in the stage floor, elevators that can raise or lower stage sections, wagons (rolling platforms) on which scenes may be mounted, and cycloramas—curved canvas or plaster backdrops used as a projection surface or to simulate the sky. Above the stage, especially in a proscenium theater, is the area known as the fly gallery, where lines for flying—that is, raising—unused scenery from the stage are manipulated, and which contains counterweight or hydraulic pipes and lengths of wood, or battens, from which lights and pieces of scenery may be suspended. Other special devices and units can be built as necessary. Although scene painting seems to be a dying art, modern scene shops are well equipped to work with plastics, metals, synthetic fabrics, paper, and other new and industrial products that until recently were not in the realm of theater.

**Lighting Design**

Lighting design, a more ephemeral art, has two functions: to illuminate the stage and the performers and to create mood and control the focus of the spectators. Stage lighting may be from a direct source such as the sun or a lamp, or it may be indirect, employing reflected light or general illumination. It has four controllable properties: intensity, color, placement on the stage, and movement—the visible changing of the first three properties. These properties are used to achieve visibility, mood, composition (the overall arrangement of light, shadow, and color), and the revelation of form—the appearance of shape and dimensionality of a performer or object as determined by light.

 Until the Renaissance, almost all performance was outdoors and therefore lit by the sun, but with indoor performance came the need for lighting instruments. Lighting was first achieved with candles and oil lamps and, in the 19th century, with gas lamps. Although colored filters, reflectors, and mechanical dimming devices were used for effects, lighting served primarily to illuminate the stage. By current standards the stage was fairly dim, which allowed greater illusionism in scenic painting. Gas lighting facilitated greater control, but only the advent of electric lighting in the late 19th century permitted the brightness and control presently available. It also allowed the dimming of the house-lights, plunging the auditorium into darkness for the first time.

Lighting design, however, is not simply aiming the lighting instruments at the stage or bathing the stage in a general wash of light. Audiences usually expect actors to be easily visible at all times and to appear to be three-dimensional. This involves the proper angling of instruments, provision of back and side lighting as well as frontal, and a proper balance of colors. Two basic types of stage-lighting instruments are employed: floodlights, which illuminate a broad area, and spotlights, which focus light more intensely on a smaller area. Instruments consist of a light source and a series of lenses and shutters in some sort of housing. These generally have a power of 500 to 5000 watts. The instruments are hung from battens and stanchions in front of, over, and at the sides of the stage. In realistic settings, lights may be focused to simulate the direction of the ostensible source, but even in these instances, performers would appear two-dimensional without back and side lighting.

Because so-called white light is normally too harsh for most theater purposes, colored filters called gels are used to soften the light and create a more pleasing effect. White light can be simulated by mixing red, blue, and green light. Most designers attempt to balance “warm” and “cool” colors to create proper shadows and textures. Except for special effects, lighting design generally strives to be unobtrusive; just as in set design, however, the skillful use of color, intensity, and distribution can have a subliminal effect on the spectators’ perceptions.

The lighting designer is often responsible for projections. These include still or moving images that substitute for or enhance painted and constructed scenery, create special effects such as stars or moonlight, or provide written legends for the identification of scenes. Images can be projected from the audience side of the stage onto opaque surfaces, or from the rear of the stage onto specially designed rear-projection screens. Similar projections are often used on scrims, semitransparent curtains stretched across the stage. Film and still projection, sometimes referred to as mixed media, was first used extensively by the German director Erwin Piscator in the 1920s and became very popular in the 1960s.

The lights are controlled by a skilled technician called the electrician, who operates a control or dimmer board, so called because a series of “dimmers” controls the intensity of each instrument or group of instruments. The most recent development in lighting technology is the memory board, a computerized control system that stores the information of each light cue or change of lights. The electrician need no longer operate each dimmer individually; by pushing one button, all the lights will change automatically to the preprogrammed intensity and at the desired speed.

**Costume Design**

 A costume is whatever is worn on the performer’s body. Costume designers are concerned primarily with clothing and accessories, but are also often responsible for wigs, masks, and makeup. Costumes convey information about the character and aid in setting the tone or mood of the production. Because most acting involves impersonation, most costuming is actual or re-created historical or contemporary dress; as with scenery, however, costumes may also be suggestive or abstract. Until the 19th century, little attention was paid to period or regional accuracy; variations on contemporary dress sufficed. Since then, however, costume designers have paid great attention to authentic period style.

As with the other forms of design, subtle effects can be achieved through choice of color, fabric, cut, texture, and weight or material. Because costume can indicate such things as social class and personality traits, and can even simulate such physical attributes as obesity or a deformity, an actor’s work can be significantly eased by its skillful design. Costume can also function as character signature, notably for such comic characters as Harlequin or the other characters of the commedia dell’arte, Charlie Chaplin’s Little Tramp, or circus clowns.

In much Oriental theater, as in classical Greek theater, costume elements are formalized. Based originally on everyday dress, the costumes became standardized and were appropriated for the stage. Colors, designs, and ornamentation all convey meaningful information.

**Mask**

A special element of costume is the mask. Although rarely used in contemporary Western theater, masks were essential in Greek and Roman drama and the commedia dell’arte and are used in most African and Oriental theater. The masks of tragedy and of comedy, as used in ancient Greek drama, are in fact the universal symbols of the theater. Masks obviate the use of the face for expression and communication and thus render the performer more puppetlike; expression depends solely on voice and gesture. Because the mask’s expression is unchanging, the character’s fate or final expression is known from the beginning, thereby removing one aspect of suspense. The mask shifts focus from the actor to the character and can thus clarify aspects of theme and plot and give a character a greater universality. Like costumes, the colors and features of the mask, especially in the Orient, indicate symbolically significant aspects of the character. In large theaters masks can also aid in visibility.

*Makeup*

Makeup may also function as a mask, especially in Oriental theater, where faces may be painted with elaborate colors and images that exaggerate and distort facial features. In Western theater, makeup is used for two purposes: to emphasize and reinforce facial features that might otherwise be lost under bright lights or at a distance and to alter signs of age, skin tone, or nose shape.

**Technical Production**

The technical aspects of production may be divided into preproduction and run of production. Preproduction technical work is supervised by the technical director in conjunction with the designers. Sets, properties (props), and costumes are made during this phase by crews in the theater shops or, in the case of most commercial theater, in professional studios.

 Props are the objects handled by actors or used in dressing the stage—all objects placed or carried on the set that are not costumes or scenery. Whereas real furniture and hand props can be used in many productions, props for period shows, nonrealistic productions, and theatrical shows such as circuses must be built. Like sets, props can be illusionistic—they may be created from papier-mвchй or plastic for lightness, exaggerated in size, irregularly shaped, or designed to appear level on a raked stage; they may also be capable of being rolled, collapsed, or folded. The person in charge of props is called the props master or mistress.

**Sound and Sound Effects**

Sound, if required, is now generally recorded during the preproduction period. From earliest times, most theatrical performances were accompanied by music that, until recently, was produced by live musicians. Since the 1930s, however, use of recorded sound has been a possibility in the theater. Although music is still the most common sound effect, wind, rain, thunder, and animal noises have been essential since the earliest Greek tragedies. Any sound that cannot be created by a performer may be considered a sound effect. Such sounds are most often used for realistic effect (for example, a train rushing by or city sounds outside a window), but they can also assist in the creation of mood or rhythm. Although many sounds can be recorded from actual sources, certain sounds do not record well and seem false when played through electronic equipment on a stage. Elaborate mechanical devices are therefore constructed to simulate these sounds, such as rain or thunder.

Technicians also create special aural and visual effects simulating explosions, fire, lightning, and apparitions and giving the illusion of moving objects or of flying.

**Stage Management**

The stage manager serves as a liaison among the technical personnel and between them and the creative staff, oversees rehearsals, coordinates all aspects of production, and runs the show in performance. The stage manager “calls” the show—signals all technicians when to take their cues—and supervises the actors during the production.

The running crew is determined by the needs of the production. It may consist of the following: scene crews, or grips, who shift the scenery; prop crews; wardrobe crews, who assist the performers with their costumes and maintain the costumes between performances; sound technicians; electricians; and flymen, who operate all flying scenery. In commercial theater, all technicians belong to the stagehands union. On Broadway, all productions are required to hire a minimum crew, which may in fact exceed the demands of the production. The house carpenter, for example, may be the person who raises the curtain.

When the scenery is built, it is “loaded in” and set up. Lights are hung, focused, and gelled—given colored filters. Technical rehearsals are then held, during which light, sound, and scene, and scene-shift cues are set and rehearsed—first with the crews alone, then with actors. Finally, in dress rehearsals, the show is rehearsed with all elements except the presence of an audience. When a show closes, the set is “struck” and “loaded out.”