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AN EVALUATION OF THE EMPLOYMENT OF PANORAMIC SCENERY
IN THE NINETEENTH-CENTURY THEATRE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Richard Carl Wickman, A. B., B. D., M. A.

*****

The Ohio State University
1961

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[Signature]
Adviser
Department of Speech
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CHAPTER I

INTRODUCTION

I. THE ERA OF THE PANORAMA

The nineteenth century can conveniently be given a number of different labels or titles as far as its political, economic, or social developments are concerned. It can be called the century of industrial growth or the period of imperialistic expansion. Or, the summation of its characteristics can be suitably labeled Victorian. But as far as its pictorial entertainment tastes were concerned, it should be called most expressively, perhaps, the Era of the Panorama.

No single entertainment factor or device better sums up the tastes and attitudes of the nineteenth century than the panorama in all of its various forms. No single genre of painting indicates more clearly the artistic fancies of the Victorian public, nor can any one theatrical device more distinctly stamp the theatrical appetites or the amusement pleasures of the period. The panorama, as an exhibition hall display or as a form of theatrical scenery, was one of the most popular visual spectacles of the nineteenth century. Year in and year out, from the first
decades of the nineteenth century into the early years of the twentieth, the American and European public attended panoramic exhibitions in great numbers. From the panoramas they received artistic satisfaction, amusement, edification, and education.

The panorama itself took many different forms and was made available to the public in a number of ways. There were the huge, circular panoramas, which required special rotunda-like buildings, and were so large that the spectator felt dwarfed as he looked at the paintings. There were the moving panoramic displays, which were set up in halls, theatres, and church auditoriums and allowed the spectators to watch thousands of feet of painted canvas pass before their eyes. And, finally, there were the specifically scenic theatrical panoramas, which were used in a variety of ways to provide moving background scenery for dramatic actions. All of these forms were closely related, not only in their origins and in the visual effects which they produced, but, more significantly, in the way in which the public regarded them as one kind of entertainment, regardless of the manner of their employment. To the nineteenth-century public, a panorama was a visual spectacle. That was its appeal; and it was of little importance that the panorama might one day be seen in an immense rotunda and viewed the next day as a
background scene in a spectacular melodrama. The interest of the public was not in the panorama's form, but in the pictorial spectacle which it presented under any circumstances.

II. THE PURPOSE AND SCOPE OF THE STUDY

The theatre of the nineteenth century was a marvelously vital enterprise. Its prodigious achievements and ebullient productivity are often scorned today because it yielded few plays of lasting literary worth. The fact is that the nineteenth-century theatre was too busy entertaining a clamorous public to be much concerned with either dramatic literature or posterity. The written play was usually an excuse for mounting a spectacular theatrical display, and whatever literary or poetic merit the play might contain was incidental or even accidental. The nineteenth-century audiences wanted most of all to be entertained, just as the vast majority of cinema audiences wish to be amused and diverted today, and it was the task of the theatre managers to provide entertainment which was thrilling, fast-paced, and visually exciting. When the managers were most successful at that task, they offered a theatrical spectacle which could never be forgotten by the audiences who witnessed it.

In order to provide this kind of entertainment, it was necessary to develop scenic and mechanical devices which
could be used skillfully and convincingly. In consequence, the nineteenth-century theatre originated and perfected techniques for staging scenic spectacles which had never been used before, and which, with the change in theatrical tastes, have never been used since on such a large scale. The panorama was one of these devices. It probably ranks no higher in actual employment than most other scenic elements, but by its very nature it was peculiarly typical of all of them. It was not only used as a scene-changing technique and as a mechanical device for giving motion to the scene, but it also had a visual and illusionistic appeal which was the cherished objective of all theatrical scenery during the period. This study purposes to investigate the various usages and effects of the theatrical panorama, not only to clarify this important device itself, but to contribute significant information concerning the over-all scenic purposes and pleasures of the nineteenth-century theatre.

In order to accomplish this purpose, however, the panorama cannot be considered only in the light of its scenic theatrical usage. There are two reasons for this. In the first place, the whole concept of panoramic painting, within or without the theatre, was associated with public tastes and artistic fancies which were by no means strictly
theatrical. The panorama was a spectacular exhibition or scenic display in its own right, and only after its popularity had been established did the theatres adopt it as a form of stage scenery. No clear idea, then, of the scope or visual appeal of the panorama can be received from a study limited to its scenic employment. The panoramic exhibitions had their own kind of theatrical flare, and a survey of their development and influence must be considered an essential part of this kind of study. Secondly, the materials concerning the panoramic exhibitions are more-abundantly available to present-day researchers than those materials specifically related to panoramic scenery. There is more extant evidence of the techniques of painting, the public reactions, and the artistic effects of the exhibition panoramas. Fortunately, the panorama was used in much the same manner in the exhibition halls as in the theatres, and evidence concerning one form is equally applicable to the other.

The formal division of this study into chapters will treat the subject matter in the following manner: Chapter II will survey the historical precedents in the areas of art and entertainment which led up to the development of the panorama; Chapter III will discuss the invention and earliest development of panoramic forms; Chapter IV will present a chronological survey of the exhibition panoramas during
the nineteenth century, with a particular emphasis upon their scope, variety, and popularity; Chapter V will detail the manner in which the panorama came to be used as theatrical scenery and the various scenic and mechanical uses to which it was put; Chapter VI will consider the causes and manner of the panorama's disappearance from the theatre at the end of the nineteenth century; and Chapter VII will draw together conclusions and recommendations warranted by the study.

III. TERMINOLOGY

Terms used in this study are identified and clarified as they appear in the text or as their identification seems most appropriate. However, there are several terms and uses of terms which should receive clarification from the outset.

Panorama. Panorama is used in reference to any of the panoramic forms of painting or exhibiting: circular panoramas, moving panoramas, or panoramas with a variety of special effects. Theatre and exhibition hall entrepreneurs of the nineteenth century used many different terms, most of them ending in -orama, to advertise their devices. The over-all term, however, which is applicable in all cases, unless otherwise specified, is panorama.
Diorama. Diorama is used in reference to luminous, transparent, or special effects which were employed in panoramic exhibitions. The term, as it was commonly used, should be thought of as a kind of panoramic display in which various special effects supplemented and enlivened the painting.

Panoramic exhibitions. This term is used in reference to the panoramic displays or exhibitions which were not presented in connection with a dramatic performance. Panoramas of this type could be either circular and stationary, or moving.

Panoramic scene settings. Panoramas which were used in connection with a dramatic performance are called panoramic scene settings or panoramic scenery. These panoramas were always moving panoramas.

Chapter II and Chapter III will further clarify the use of these terms. It should be mentioned, however, that words like panorama, diorama, and other similar, derivative terms have often been used in unclear and inaccurate ways. One of the purposes of this study will be to clarify the manner in which these words were employed in the nineteenth century and the manner in which they should be used today in historical references.
IV. SOURCES AND LIMITATIONS

Considering the vast popularity and scope of the panoramas during the nineteenth century, it is surprising that so little has been written about them. The American panoramas of the Mississippi River have attracted some attention, but the emphasis has been upon Americana rather than the panorama. It is surprising that so few studies have been undertaken concerning the painting of the panorama canvases.

It is more understandable, perhaps, that so little has been written about the theatrical uses of the panorama, since the history of theatrical staging during the eighteenth and nineteenth centuries has been recorded in only the most scanty manner. Even so, the general disregard with which panoramic scenery has been treated is astonishing. It could be expected, for instance, that the various stage uses of the panorama would at least be mentioned in a compendium like *The Oxford Companion to the Theatre*, but such is not the case. The word is only used a few times in conjunction with cycloramic lighting practices, and even then it receives no identification. Needless to say the panorama is all but totally ignored in the standard historical textbooks on the theatre.
Only three relatively familiar sources contain specific information on the employment of the theatrical panorama during the nineteenth century. These are Georges Moynet's *Trucs et Decors* (c. 1893), Friedrich Kranich's *Bühnentechnik der Gegenwart* (1929), and Edwin O. Sachs' articles on modern theatre stages in the periodical, *Engineering* (c. 1896). Even in these sources the references to the panorama are slight enough and are far from clearly stated.

This study, then, has had to depend upon a variety of primary and secondary sources which, in most cases, contain spotty and incomplete information. George C. D. Odell's *Annals of the New York Stage* has been invaluable in noting and comparing the scope of panoramic usages during the years 1790-1896, but his references are brief and perfunctory.

Reviews of plays, in which panoramas are noted as having been used, are usually devoid of specific staging references of any kind.

It would have been quite inconvenient, if not impossible, to complete a study of this nature without the resources of The Ohio State University Theatre Collection. Prompt books, collections of programs and playbills, scene designs, treatises on staging and theatre architecture, and descriptive brochures of panoramic exhibits have been gathered in The Ohio State University Theatre Collection in
microfilm copies from libraries in the United States and Europe. These have served as the most important primary sources for the study. The Ohio State University Theatre Collection materials will be specified in footnotes and bibliography with the letters, OSUTC, followed by the film number.

Periodicals containing technical and descriptive articles have been the main source of information outside The Ohio State University Theatre Collection. The Scientific American, which has been largely ignored in theatrical research, proved to be exceptionally valuable in regard to theatrical uses of the panorama in the late nineteenth century. In all possible cases the attempt has been made to support the development and employment of the panorama with pictorial illustrations, some of which are here used in a theatrical study for the first time.

The study will cover the whole period of the panorama's greatest popularity; that is, from the last decade of the eighteenth century until the first two decades of the twentieth century. Background materials of a much earlier date are included, of course, but the actual era of the panorama extended from 1785 to approximately 1920, with the greatest panoramic activity occurring between 1830 and 1890.
Since the panorama was popular in practically all the countries of Europe and in the United States, it has been necessary to limit the geographical scope of the study. Materials were primarily available on the panorama in England, France, and the United States. This study, then, will investigate the panoramic exhibitions and panoramic scenery as they were used in these three countries, with the emphasis upon England and the United States. The availability of source materials and the scope of the topic have dictated these limitations.
CHAPTER II

THE HISTORICAL PRECEDENTS TO THE
DEVELOPMENT OF THE PANORAMA

I. INTRODUCTION

The panorama did not begin as either a scenic concept or a scenic term. As is the case with many scenic ingredients of the theatre—such as colors, fabrics, lighting instruments, and various mechanisms—the earliest inventions and developments were in no manner connected with theatrical scenery. In most cases there was very likely not even a suspicion that such devices would ever be put to widespread scenic use. Once the theatre accepted them and made them its own, however, then many specialized scenic refinements were made.

The panorama had its beginnings apart from the theatre. It was a concept of the easel painter and it was first given public recognition in the form of an exhibition, rather than as a dramatic entertainment. The artistic concepts upon which it was based did not grow from the theatre, and the techniques of its painting and the mode of its construction were not based on theatrical precedents.
This is not to say that pre-panorama theatrical scene painting was entirely divorced from the painting methods later used on panoramas. A large painting is, after all, a large painting, whether hung in an exhibition hall or suspended at the rear of a stage scene, and certain fundamental artistic techniques are applicable in both cases. But this was knowledge commonly shared by all painters, and the earliest painters of panoramas had not gained that knowledge in the theatre.

Thus it happens that any understanding of panoramic scenery depends upon a more basic comprehension of the exhibition hall panoramas. The theatre took the panorama over from the exhibition hall, and took it over so completely as a matter of fact that the uses to which it was put on the stage were little different from the manner in which it was employed in the display halls. As scenery it was a moving device, of course, while many exhibition panoramas were circular and stationary. But even the earliest moving forms were developed outside the theatre and the techniques, mechanisms, and even the scenic effects which they produced, were quite similar to those later displayed on the stage.

Another point must be remembered. The "living stage" has seldom bothered to chronicle the ways and means of its
backstage livelihood. This annoying fact has always made the compilation and recording of theatrical history a difficult task. Stage managers, prompters, scene painters, and others associated with the mounting and staging of plays seldom gave themselves over to literary recountings of what they did and how they did it, and few other people knew enough about it to be explicit or exact. Therefore, the present-day researcher is continually frustrated in his attempts to recreate a clear picture of past theatrical procedures.

In the case of the panorama the situation is somewhat less frustrating than usual. The reason is that the panorama was already a fully developed entertainment device before it was received into the theatre; and when it was received into the theatre it was taken in almost unchanged and unaltered. Fortunately, a sizeable body of information is available concerning the panoramic exhibitions. The exhibition hall panoramas were less influenced by the highly spontaneous and temporary character of theatre than were the scenic panoramas, and they have, therefore, been preserved in a much more complete literary and pictorial manner. A panorama used in a theatre for a play might last one night or a hundred. But when the play was over the scenery was
dismantled or destroyed and all persons concerned began to worry only about the mounting of the next production. On the other hand, a panorama often lasted in the exhibition halls for years. It would be frequently revived, and ordinarily it was viewed by many more people than would be likely to see a panorama associated with a play, however popular that play might have been. As a matter of fact, one of the mainstays of the exhibition panorama's popularity consisted in its being entertaining and instructional without being associated with the theatre in the public mind.

Finally, the panoramic exhibitions and panoramic scene settings were so very similar that it is frequently difficult to distinguish or disassociate them, both as to their mounting and as to the reaction of audiences to them. It will be seen that the same painters were sometimes associated with both kinds of panoramas, particularly in the latter years of the nineteenth century, and some panoramas were used both for display entertainments and for productions of plays. As an instance in point, in February of 1870 a production of Innisfallen; or The Men in the Gap, by Edmund Falconer, at Niblo's Gardens in New York, included William Telbin's panorama of The Lakes of Killarney,
especially imported for the piece. The panorama was not painted for this particular play, yet it was shipped over from England and worked into the production as a more or less separate, spectacular element. Once painted, many panoramas were adaptable to both scenic and exhibition hall uses.

It is the purpose of this chapter to briefly survey some of the historical precedents which made the development of the panorama artistically feasible and popularly receptive.

II. EARLIEST PRECEDENTS

Forms of art and entertainment do not spring fully-clothed from the brow of their creator. There are always precedents which form a long, slow line of development. Along this line there are flashes of genius and startling creativity which force the development onward in new or more refined directions, but the new concepts always evolve from what has been previously established. And once a new concept has been established it becomes a foundation for further development. This is the story of human civilization, of course, and the point need not be labored, but the development of the panorama can be briefly chronicled according to such a pattern. The earliest drawings became more

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inclusive in scope until they encompassed a fully circular view, which was in turn rolled up and unwound before the spectators, embellished with various spectacular and illusionistic ingredients, and culminating in the invention and uses of present-day cinematography.

This long line of development is clear in outline but often spotty and uncertain in matters of detail. It is difficult to point out the precise stages of development along the way and even more difficult to associate those stages with particular names, dates, and accomplishments. Of course, the purpose of this study is not to write the history of pre-panoramic forms, but a limited number of trends and evolutions should be established in order to provide a knowledge of the artistic foundations and tastes out of which the panorama grew.

The first certain stage in the development of the panorama was established during the period of the Roman Empire. In *Space in Medieval Painting and the Forerunners of Perspective*, Miriam Schild Bunim writes:

In Roman painting three different kinds of representation are generally distinguished. The first is the mythological scene with its single dramatized incident (megalography). It is from these pictures that knowledge of Greek painting is sought. The second type is the prospect scene which is incorporated into the architectural styles of mural decorations. These are generally said to be derived from the *scaenarum frontes* of the theatre.
The third kind of representation is the panoramic scene appearing as a mythological, sacral, or villa landscape. The origin of the panoramic landscape is much disputed. It has been attributed to Alexandria and to Asia Minor, and it has been claimed as native Roman, by various scholars. Whatever its source, its developments took place in Roman painting.\(^2\)

Thus the Roman artists were the first to employ panoramic concepts in their paintings to any considerable degree. Bunim goes on to specify the concept and content of Roman panoramic views:

The panoramic views . . . achieve the effect of deep tridimensional space even where the picture plane remains a neutral surface. In these panoramic scenes [see Figure 1] . . . the neutrality of the picture plane is overcome by the effective optional representation of figures and objects. The sketchiness and minuteness of the features of the landscape scattered over the picture plane create an illusion of a vast area in depth on what is actually a vertical pictorial surface. Although there is no unity of point of view, and although often the foreshortening is not consistent with the level in depth depicted, diminution in size with apparent recession is frequently observed and the relative scale of the figures to the objects in the landscape is roughly indicated. It is this type of landscape which illustrates the great effect that optical representation may have on the character of space. Actually the organization of the scene is not far removed from the type of parallel-plane composition found in Egyptian and Mesopotamian art, where the figures and objects are spread out alongside and above one another on the untreated or neutral picture plane. But there the conceptual method emphasizes the vertical and two-dimensional form and prevents an illusion of depth. In the

Figure 1

A Roman Panorama

Reproduced from Miriam Schild Bunim, Space in Medieval Painting and the Forerunners of Perspective (New York: Columbia University Press, 1940), Fig. 8, p. 221.
Roman landscapes, on the other hand, although the picture plane is neutral and the figures and objects spread out over the entire surface with little overlapping, the impression of depth is remarkably strong. The optical form of the figures and objects, the frequent use of angular views in the buildings, the observation of diminution, and the sketchy, or impressionistic, technique create an impression of a bird's-eye view.3

This description of the early Roman panoramic paintings could be applied almost verbatim to the panoramas of the nineteenth century. As will be pointed out in greater detail later in this study, the basic and essential ingredients of panoramic art are an illusion of depth and vast space, a use of highly realistic perspective and shadowing, and an absence of sharp detail which allows a convincing impression of actual distance. All of these essentials, according to Bunim, were already being used to some degree by Roman panoramic painters. The panoramic view illustrated by Figure 1, if compared to the nineteenth-century panoramas, lacks consistency of perspective and the transition from one object to another is abrupt and uneven, but these are matters of refinement rather than differences in artistic conception.

3 Ibid., p. 33.
Concluding her remarks about panoramic paintings, Bunim writes:

A sense of depth is created by the vista and by the impressionistic technique—a gradual fading of the colors as they approach the horizon. It is a pseudoimpressionism, however, as has often been observed, for there is no unity in the lighting nor is there any systematic distribution of color as related to a particular time and place.

By the nineteenth century, the pseudo-impressionism had been polished to sophistication. The lighting effects on the painting, with the aid of gas jets and, later, electricity, were highly realistic and spectacularly beautiful. The distribution of color was also cultivated to a high degree of artistic illusion and perfection. But the remarkable thing is that so many of the essentials of panoramic art were known and practiced as early as the Roman era.

It was, however, with the revival of classical learning in the Renaissance that panoramic painting began to flourish. In the fourteenth century, Ambrogio Lorenzetti developed a panoramic form in Italy. In one of his paintings, called a View of a City, there is a realistic sense of depth and perspective. The painting is not large enough to be a true panorama, but it is possible that the extant scene

\[4\text{Ibid., p. } 34.\]
is only a portion of a much larger canvas. Lorenzetti's work was only a beginning, however, for, as Bunim remarks:

In landscapes the representation of a vast panorama in which the effect of depth is obtained by gradual transitions of scale in the planes of the ground was not accomplished until the fifteenth century. Ambrogio Lorenzetti approached nearer to this form than did any other artist of the fourteenth century.

Artists of the Renaissance continued to be interested in creating special illusions in their paintings. The scene designers of the Renaissance theatres experimented with special illusions achieved through the uses of perspective. Single-eye-point perspective and, later, corner perspective were commonly used in Renaissance scenery to give the impression of depth and distance. The panoramic paintings and panoramic scenery of the nineteenth-century theatre employed many perspective techniques and devices which were developed in the Renaissance theatres. Indeed, both the perspective painting of the Renaissance and the panoramic painting of the nineteenth century shared certain basic artistic ingredients, (as noted on page 21 above). The most distinctive artistic difference between Renaissance perspective scenery and later panoramic scenery was the panorama's emphasis on a broad, neutral background or picture plane, upon which a number of separate but related scenes were painted. Whereas the single

5Ibid., p. 144. 6Ibid., p. 174.
perspective scene tended to draw and narrow the spectator's attention toward one scenic object, the panoramic scene attempted to broaden the spectator's view so that his illusionistic impression was one of vast horizontal space.

However, other artistic forces, almost wholly unrelated to the theatre, were at work during the seventeenth and eighteenth centuries, and it is from these that the panorama developed.

III. LANDSCAPE PAINTING

The first of these forces was the growing interest of easel painters to represent vistas of natural beauty. The countryside, the town square, and all points in between were becoming popular subjects for painting during the seventeenth and eighteenth centuries. Vast representations of hill and dale were brushed onto canvasses, and the sentimentally inclined public of the eighteenth century found these paintings enchanting and charming. That this artistic interest was particularly strong in England helps to explain why the panorama was first developed by English artists and why it was always more popular in England and America than in any other countries.

C. H. Collins Baker, in The Art Treasures of Great Britain, writes:

The English genius in pictorial art has found its happiest expression in landscape and seascape.
Whatever may be our relative achievement in portrai-
ture and figure subjects, it is in their intimacy
with out-of-doors Nature that our painters have
excelled. In truth this sympathy with Nature is a
conspicuous trait of our literature as well; had
they not expressed themselves in meter our great
poets had been landscape painters of incomparable
rank.7

Today, of course, the beautiful landscape painting
lacks artistic prestige. It is considered much too romantic,
quaint, or sentimental. But English painters of the seven-
teenth and eighteenth centuries found great delight in
recording the pastoral and sylvan beauties of the English
countryside. The solid mercantile public of England during
the early and advanced years of the Industrial Revolution
found such art truly lovely and admirable. Indeed, such
sentiments still have a strong effect on English tastes.
In the introduction to his two-volume work, A Chronological
History of the Old English Landscape Painters, Colonel
Maurice Harold Grant rhapsodizes:

No doubt there exist men who are incapable
of love of the country, just as there are men
incapable of love itself; but they are not the best
of men, at any rate they are not normal men, and
they are in any case in an infinitesimal minority.
To most of us the keenest joy of life is roofed
beneath the open sky, with the air coming clean
through the great casements of the horizon, our
carpet the velvet pile of the grass, our only doors

7C. H. Collins Baker (ed.), The Art Treasures of
Great Britain (London and Toronto: J. M. Dent and Sons,
Ltd., 1914), p. 41.
the rough gates of the pastures. The towering woodland avenues, the deep dales, their walls bricked with green fields and "pointed" with a myriad hedges, are still the streets where the soul treads happiest and most free.\textsuperscript{8}

The Colonel's remarks indicate that for an Englishman not to appreciate landscape painting is not only boorish and stupid, but very close to unpatriotic. And if his quiet insinuation that such people are not even normal was a commonly accepted view of the seventeenth, eighteenth, and nineteenth centuries, then there remains little wonder that so many Englishmen hastened to demonstrate their appreciation for landscape art.

Colonel Grant also argues that landscape paintings are particularly pleasing because they have an aura of age and tradition. "It is the old, not the new, that is loved upon canvas," he writes.\textsuperscript{9} This assertion is unquestionably applicable to the tastes of the eighteenth and nineteenth centuries when sentimentalism, romanticism, and antiquarianism fashioned artistic tastes in such a manner that nothing seemed more appealing than a landscape of misty, overgrown ruins. It was almost as though the English only waited for their castles and monasteries to decay and go to weeds so

\textsuperscript{8}Maurice Harold Grant, A Chronological History of Old English Landscape Painters (In Oil) From the XVIth Century to the XIX Century (London: Hudson & Kearns, Ltd.), I, xi.

\textsuperscript{9}Ibid., xi.
that they could fully appreciate paintings made of them.

Colonel Grant attributed the popularity of landscape painting to Almighty God, who was ably assisted by such human creatures as Sandby, Gainsborough, and De Loutherbourg.

There is, of course, ample evidence that these romanticized landscape paintings were popular as background scenery upon the English stage. They were especially popular in the Gothic dramas of the late eighteenth and early nineteenth centuries, in which the backscenes were filled with representations of romanticized ruins and gloomy landscapes. But there is no indication that the panorama developed from these theatrical uses of landscape painting. Rather, the popularity of landscape painting was the motivation for both the panorama and the landscape vista upon the stage.

The non-panoramic landscape paintings, which were popularly used upon the stage as backscenes, both before and after the panorama was developed, might best be called prospect scenes. A prospect scene is simply an extensive view which serves as a pleasing artistic background for the scene. Its purpose is to cut off the scene and also to provide a pleasant picture of the locale in front of which the play's action takes place. These prospect views were popular in the English theatre as early as the Restoration,
and some theatre historians refer to them as "panoramic views." But this use of the term is not accurate. The prospect scene, which was a theatrical development from landscape painting, was not the same thing as the panorama.

A typical prospect scene of the Restoration period, for example, was often highly ornate and was supplemented with a variety of set pieces upon which the actors appeared for a spectacular scene, usually at the end of an act. A spectacular Restoration opera, The World in the Moon, by Elkanah Settle, was presented at Dorset Gardens in May of 1697. The final scene of the opera is typical of the prospect scenes of the late seventeenth and early eighteenth centuries:

Being a prospect of terras [sic] walks on 8 several stages mounted one above another, each stage contains a range of stonework extending from side to side, decorated with paintings in fresco of heroic history; over each piece of painting are carved rails and banisters with pedestals: on 32 pedestals are planted 16 golden flower pots, and 16 statues of gods and goddesses . . . Through the center and advancing 24 foot high is an ascent of marble steps. This set of scenes is compressed round about with flowers tied up in ribbons of gold . . . with a prospect of a garden above the highest terras.¹¹

¹⁰Cf. Montague Summer's use of the term throughout his Restoration Stage.

¹¹Elkanah Settle, The World in the Moon, OSUTC Film 561, p. 42.
The prospect scene achieved through ostentatious spectacle what the panorama later achieved through movement, painstaking realism, and variety. The motivation for scenic splendor may have been the same in both cases, but it is clear that the prospect scene and the panorama are not the same and they should not be confused when making reference to scenic forms.

IV. REALISM, ILLUSION, AND MECHANIZED EXHIBITIONS

This discussion of precedents to the panorama must now proceed from the field of landscape painting and romanticized scenery to the equally important areas of realism, illusion, and mechanized exhibitions. The earliest stationary, or circular panoramas, when they were first developed in the last years of the eighteenth century, were motivated not only by an interest in landscape art, but also by a public partiality toward representations of illusion and realism; and, of course, the first moving panoramas were influenced by the growing English fascination with mechanical gadgetry of all kinds. This last was a result of the flourish of mechanization, which led up to and through the Industrial Revolution.
Volumes have been written about realistic illusion to determine whether such a phrase can truly be applied to art or whether it refers only to clever trickery. While it is not the purpose of this study to offer a solution to this problem, it is important to understand that the panorama, in its earliest and in its most advanced forms, was primarily concerned with giving a complete illusion of reality. The successful panorama was the one which momentarily deceived its spectators into thinking that they were not looking at a painting at all, but were actually surrounded by the real thing. This was part of the enjoyment of it all—both on the part of the creators and the spectators—and no efforts were spared to accomplish a full illusion of reality. It was, of course, a rather romanticized reality; that is, all ugliness was removed.

In an effort to achieve this reality, the talents of the machinist, the toymaker, and the landscape architect were added to those of the painter. Not long after the panorama became popular in the exhibition halls, it was discovered that the big painting alone, for all of its beauty and realistic illusion, was not enough to achieve that total degree of illusion so much desired. Furthermore, even when the panorama satisfactorily provided illusion, it was frequently dull, especially after the first novel effects
had worn off. After all, the panorama was not the kind of painting which could be loved and admired in itself for any great period of time. It was too big, too lacking in interesting details, too two-dimensional, and too topical. In other words, its entertainment value, especially in the face of strong competition, could wane rapidly unless novelties were included to add more interest and to make the illusion appear more startling.

The panorama exhibitors were not the first to devise entertaining mechanical and three-dimensional objects to delight the eager-to-be-deceived eyes of the public. As early as 1661 a tract, purported to have been written by a J. H. Ghent, advertised an exhibit called Paradise at the Two Wreathed Posts in Show Lane, London. The tract reads:

Paradise transplanted and Restored in a most Artfull and lively Representation of the several Creatures, Plants, Flowers, and other Vegetables, in their full growth, shape and colour . . . the Design is a Model, or Representation of that Beautiful Prospect Adam had in Paradise, when the whole Creation of Animals were together subjected to his imperious eye, and from his Mouth received their several names.12

This exhibit seems to have been a series of background paintings with three-dimensional objects and figures in the foreground, arranged something like a landscape architect's

model. The highly picturesque subject matter of this exhibition is interesting on two counts. First, it leads one to speculate whether the lack of theatrical entertainments during the Commonwealth did not encourage this kind of thoroughly inoffensive entertainment. Not even the most stern Roundhead could have objected to it. Second, it is significant that almost two centuries later the most popular panoramas were those depicting religious subjects: panoramic paintings of the Holy Land or panoramic representations of biblical stories. As will be noted in greater detail in Chapter IV, the panoramas were most regularly attended by the grass roots middle-class, who found most other theatrical entertainments lascivious and immoral. Evidently the same class of people, back during the seventeenth and eighteenth centuries, could find solace for their inability to enjoy theatre by attending these "Artfull and Lifely" representations.

On October 22, 1681, twenty years after the exhibition noted above, the True Protestant Mercury contained an advertisement reading:

There is a new and most exact piece of art, called Creatio Mundi, or the World Made in 6 days, lately set up over against the Red Cow in Cross Street . . . where Mankind, Beasts, Birds, Thunder, Rain, Sea, Sun, Moon, Stars, and abundance of other
things, all seeming real, as if it were the same as it represents, is performed by a new way, never before invented. . . .^3

This display is quite similar to the earlier exhibition. In fact it is possible that these two descriptions refer to the same exhibition, which was re-displayed from time to time with new pieces and effects.14 But in the description of the 1681 exhibit there are several interesting statements which bear directly upon the later popularity of the panoramas and unquestionably provide precedents for their development.

The two phrases, "a new and most exact piece of art," and "all seeming real, as if it were the same as it represents," indicate that there were some novel qualities about the exhibition. The second phrase particularly indicates that exhibitions of illusion were somewhat unusual and, by their very nature, startling enough to attract public interest. Most interesting of all, however, is that the phrase, "all seeming real, as if it were the same as it represents," could be applied word for word to the appeal of panoramas in the nineteenth century. The panoramas were more refined than these seventeenth-century forerunners, but the desired effect upon the spectators was entirely the same.

13 Ibid., p. 299. 14 Ibid., p. 300.
In 1709 a German by the name of Jacobus Morian exhibited in Fleet Street a "Moving Picture," worked by clockworks. Ships sailed in front of a seascape, coaches travelled in front of a landscape, and mechanized figures and animals moved in various ways. This was an outgrowth of the clocksmith's art, much like the moving figures on elaborate Swiss clocks today, and there is no indication that the seascape or landscape views moved in any direction. Still, the exhibit indicates something about the public's taste for illusionistic entertainments in the century previous to the panorama's invention.

In 1729 a more elaborate exhibition was put together by one Christopher Pinchbeck, whose father was a clocksmith and a toyer with moving pictures. The advertisement for the exhibition reads:

. . . a curious Machine, being the finest Piece of Workmanship in the World, for Moving Pictures and other Curiosities . . . . Wherein is naturally imitated the Firmament, spangled with a Multitude of Stars; The Moon's Increase and Decrease; the Dawn of Day; the Sun diffusing his light at his rising, the beautiful Redness of the Horizon at his Setting as in a fine Summer's Evening. The Ocean is also represented, with Ships under Sail, as though several miles distance; others so near that their shadows are seen in the water, and, as they pass by any Fort, Castle, etc., they salute it with their Guns, the Report and Echo of which are heard according to their seeming distance.\textsuperscript{15}

\textsuperscript{15}Ibid., p. 300. \textsuperscript{16}Ibid., p. 301.
If this exhibition occurred as advertised, it was a truly startling display for so early a date. The advertisement provides no certain indications of how the exhibition was operated, except that some kind of machinery and moving pictures were involved. Again, as with Jacobus Morian's exhibit in 1702, there is no indication that the backgrounds or landscapes moved. But the emphasis of the entertainment was clearly placed upon naturalistic illusion, and certain special lighting effects were evidently used. Materials to give the illusion of water must also have been used, and realistic sound effects were employed. The moving ships were probably part of the clockwork devices. Unfortunately, there is no indication of the size of the exhibition or the kind of room in which it was displayed.

The most interesting, indeed startling aspect of the exhibition is that so many of the advertised effects seem so similar to those used by Philippe Jacques De Loutherbourg in his Eidophusikon in the 1780's.

Much more will be said about Philippe De Loutherbourg in Chapter V, concerning the development of the theatrical panoramas. However, in conjunction with the present discussion, it must be noted that De Loutherbourg has usually been considered the first to perfect various realistic effects pertaining to delicate lighting impressions upon the stage.
These he experimented with in his Eidophusikon during the 1780's, and some of them were described by W. H. Pyne in his Wine and Walnuts in 1823:

[The scene of the Eidophusikon] . . . on the rising of the curtain, was enveloped in that mysterious light which is the precursor of day-break, so true to nature, that the imagination of the spectator sniffed the sweet breath of morn. A faint light appeared along the horizon; the scene assumed a vapourish tint of grey; presently a gleam of saffron, changing to the pure varieties that tinge the fleecy clouds that pass away in morning mist; the picture brightened by degrees; the sun appeared, gilding the tops of the trees and the projections of the lofty buildings, and burnishing the vanes on the cupolas; when the whole scene burst upon the eye in the gorgeous splendor of a beauteous day.17

This exhibition, so glowingly described by Mr. Pyne, was advertised in a London newspaper on April 3, 1781:

At the large house in Lisle Street, fronting Leicester Street, Leicester Square, this and every evening until further notice will be exhibited "Eidophusikon," or various imitations of natural phenomena, represented by moving pictures, invented and painted by M. De Loutherbourg in a manner entirely new.18

Mr. Pyne's description of the Eidophusikon and the newspaper advertisement bear a striking similarity to the account of Christopher Pinchbeck's "Machine" fifty-two years before. The representation of day-break, the diffusion of


light along the horizon, and the illusions of distance and perspective were assuredly striving for the same effect in both cases. Both advertisements underlined the natural phenomena or imitation which the devices obtained. It is known that De Loutherbourg's Eidophusikon was a small, model stage; it seems reasonable to believe that Pinchbeck's "Machine" was an exhibition of somewhat the same size. It is unfortunate that so little is known of the working parts of either device, but certainly their similarities are sufficient in number and kind to indicate that Pinchbeck's "Machine" was a forerunner of De Loutherbourg's Eidophusikon. Whether De Loutherbourg had any knowledge of Christopher Pinchbeck's work is a matter for speculation.

It is known, however, that De Loutherbourg's Eidophusikon won him the name of "panoramist" around the beginning of the nineteenth century. This was not a correct title, since De Loutherbourg's devices, while possessing panoramic elements, were not precisely panoramas or moving panoramas. The interesting point is that De Loutherbourg's so-called panoramic devices were largely anticipated by Christopher Pinchbeck over half a century before. This fact is indicative of a much longer and stronger pre-panoramic tradition than has heretofore been supposed.

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19Ibid., p. 302.
V. SUMMARY

This brief survey of historical precedents to the development of the panorama indicates that there were two forces at work in those centuries preceding the panorama's invention. The first was an interest in landscape painting, which first developed during the Roman period and saw its greatest period of activity in eighteenth- and nineteenth-century England. Landscape paintings, because of their popularity, were used on the stage as prospect scenes. The second force at work was a popular interest in mechanical and lighting effects which produced exhibitions of realistic illusion. Various kinds of non-theatrical exhibitions employed a combination of landscape painting and illusionistic effects to provide a form of entertainment which anticipated the appeal of the Panorama. By the close of the eighteenth century there was strong public interest in these kinds of representations, and the panorama's invention was undoubtedly motivated in part by a desire to capitalize on that interest.
CHAPTER III

THE INVENTION AND EARLY DEVELOPMENT
OF THE PANORAMA

I. THE FIRST PANORAMA AND ITS INVENTOR

Mr. Robert Barker of Edinburgh, Scotland was the inventor of the panorama. He was a portrait and miniature painter in that ancient capital of the Scots, and is said to have been a man of much inventive talent, having devised a mechanical system of perspective. He supplemented his income as an artist by giving instructions in the artistic and mechanical techniques he had invented.¹

There are two stories describing the manner in which the idea for the panorama first came to Mr. Barker. The first is fanciful and romantic; the second is more prosaic but, very likely, more accurate.

The first story tells that Mr. Barker, at some unspecified period before the invention of his panoramas, found himself in debtors' prison in Edinburgh. The precise reason for his being there is nowhere stated, but certainly it is not difficult to understand that free-lance portrait

painters, then as now occasionally found themselves in financial difficulties. During his period of confinement, Mr. Barker one day received a letter in his prison cell. The source of light for the cell came from a small aperture in the ceiling, and at that time of the day, either morning or late afternoon, the rays of the sun came through the aperture at a sharp angle and fell upon one of the walls of the cell. Mr. Barker placed his letter against the bright portion of the wall in order to read it, and was intrigued with the effect created by the light falling upon the paper from that particular angle.  

It is difficult to imagine how this single occurrence led Mr. Barker to conceive of the panorama. What might have occurred to him at the time was an idea which later became an important part of the display techniques for panoramas: that the exhibition hall panoramas should be illuminated by daylight, coming from skylights above and reflecting upon the surface of the painting.

The second story, which took place about 1786, is the more acceptable one as far as the actual conception of the

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panorama is concerned. Mr. G. R. Corner details it in his brief biographical account of Barker's professional life and work:

He [Mr. Barker] was walking one day with his daughter (the late Mrs. Lightfoot) on the Calton Hill, when observing her father to be thoughtful, Miss Barker asked him what was the subject of his thoughts. He replied, that he was thinking whether it would not be possible to give the whole view from that hill in one picture. She smiled at an idea so contrary to all the rules of art; but her father said he thought it was to be accomplished by means of a square frame fixed at one spot on the hill; he would draw the scene presented in that frame, and then, shifting the frame to the left or right, he would draw the adjoining part of the landscape, and so going around the top of the hill, he would obtain the view on all sides; and the several drawings being fixed together and placed in a circle, the whole view might be seen from the interior of the circle, as from the summit of the hill.

This idea he forthwith put in execution, having no one to assist him but his son, Henry Aston, then only about twelve years old. Mr. H. A. Barker says:—"I was set to work to take outlines of the city only, from the top of the observatory on the Calton Hill. I have no idea what sort of drawing was made by me,—no doubt it was wretchedly bad,—but it answered my father's purpose; and from the outlines he made a drawing upon paper pasted on linen, which gave a rather rude representation of 'Auld Reekie.'"

But the greatest difficulty remained. The drawings being made on flat surfaces, when placed together in a circle the horizontal lines appeared curved instead of straight, unless on the exact level of the eye; and to meet this difficulty Mr. Barker had to invent a system of curved lines peculiarly adapted to the concave surface of the picture, which would appear straight when viewed from a platform at a certain level in the center. This difficulty, with many others of a similar nature, which may
more easily be imagined than described, having been surmounted, Mr. Barker "took his picture up to London, where being introduced to Sir Joshua Reynolds, then President of the Royal Academy, the new invention was exhibited to him, put in a circular form, and shown by candle-light; but whether (says Mr. H. A. Barker) the drawings were so bad, or Sir Joshua did not comprehend my father's idea, he, with great politeness, said the thing would never do, and therefore recommended him to give it up! Here was a disappointment, but my father was too confident of success to be thus dissuaded from following up his plans, and he therefore took out a patent for the invention, under the title of La Nature a Coup d'Oeil.\(^3\)

This story, having been reported by Robert Barker's son, is probably a fairly straightforward account of Barker's first conception of the panorama. Another story has it that Barker happened to have an umbrella when he was walking on top of Calton Hill. When a light drizzle started, he raised the umbrella and was impressed with the 360 degree view he got from underneath the canopy.\(^4\) This may have been the experience which later gave him the idea of cutting off the spectators' view at the top of the panorama.

The dating of all these events leading up to the application for a patent is unknown. The patent, however, was taken out on July 3, 1787.\(^5\) The events previous to this

\(^3\)Corner, op. cit., pp. 4-5.


action—the first conception and drawings on Calton Hill, the arrangement of the drawings on the circular linen and the correction of the difficulties in perspective, the trip to London with the painting, and finally the exhibition before Sir Joshua Reynolds—must have taken many months of work and preparation. The chronicle quoted above states that Barker's son, Henry Aston Barker, was about twelve years old when the first sketches were made. Henry Aston Barker died in July of 1856 at the age of eighty-two. This would place his birth date in 1774 and his twelfth year in 1786. Thus it is reasonable to believe that the first conceptions and sketches of the panorama occurred in the Summer or early Fall of 1786, when the weather would have been warm enough to engage in outside painting.

The patent granted Robert Barker read as follows:

By the invention called La Nature a Coup d'Oeil, is intended, by drawing and painting and proper disposition of the whole, to perfect an entire view of any country or situation as it appears to an observer turning quite around; to produce which effect the painter or drawer must fix his station, and delineate correctly and connectedly every object which presents itself to his view as he turns around, concluding his drawing by a connection with where he began. He must observe the lights and shadows how they fall, and perfect his piece to the best of his abilities. There must be a circular building or framing erected, on which this drawing or painting may be performed; or the same may be done on canvas or other materials, or fixed or suspended on the same building or framing to answer the purpose compleat. It must be lighted
entirely from the top, either by a glazed dome or otherwise, as the artist may think proper. There must be an enclosure within the said circular building or framing, which shall prevent an observer going too near the drawing or painting, so as it may, from all parts it can be viewed, have its proper effect. This enclosure may represent a room or platform, or any other situation, and may be any form thought most convenient, but the circular form is particularly recommended, of whatever extent this inside enclosure may be. There must be over it, supported from the bottom or suspended from the top, a shade or roof, which in all directions should project so far beyond this enclosure as to prevent an observer seeing above the drawing or painting, when looking up. And there must be without this enclosure another interception to represent a wall, paling, or other interception, as the natural objects represented, or fancy may direct, so as effectually to prevent the observer from seeing below the bottom of the drawing or painting: by means of which interception nothing can be seen on the outer circle but the drawing or painting intended to represent nature. The entrance to the inner enclosure must be from below, proper building or framing being erected for that purpose, so that no door or other interruption may disturb the circle on which the view is to be represented. And there should be below the painting or drawing proper ventilators fixed, so as to render a current circulation of air through the whole, and the inner enclosure may be elevated at the will of an artist, so as to make the observers, on whatever situations he may wish they should imagine themselves, feel as if really on the spot.°

°Robert Barker, "An Entire New Contrivance or Apparatus, which I call La Nature a Coup d'Oeil, for the Purpose of Displaying views of Nature at large by Oil Painting, Fresco, Water Colours, Crayons, or any other Mode of Painting or Drawing," Repertory of Patent Inventions, IV (1796), p. 165.
was to be a full circle in form, and a special circular building was to be erected for it. The painting was to be attached to the inside of the circular wall of the building, and a platform was to be built in the center of the circular building, upon which the spectators stood. Masking devices were to be placed below and above the spectators' platform so that they were prohibited from seeing the lower or upper edges of the painting. This was necessary to attain the complete illusion, for the spectators would not be deceived into thinking that they were looking at an actual landscape if they could see the edges of the painting. The light source was to be from above, a necessity perhaps first realized by Barker while reading his letter in debtors' prison. Finally, the patent remarked that the purpose of all these devices was to make the spectator "feel as if really on the spot."

This final statement is a refinement over the earlier illusionistic devices which have been noted. Christopher Pinchbeck's attempt in 1729 was only to give a believable representation of nature, and De Loutherbourg's Eidophusikon sought to give "various imitations of natural phenomena." Evidently neither of these exhibitions pretended to delude the observers into thinking that they were in actuality "on the spot." Clearly, however, the avowed purpose of Barker's
La Nature a Coup d'Oeil was to use a combination of landscape painting, lighting, and physical conditioning to permit the spectators to lose all sense of real location, to the degree that they experienced a sense of actuality. Panoramists from Barker's time on were motivated by the same purpose.

Barker's original plans for a panorama building served as the basis for the construction of such buildings throughout the nineteenth century. Refinements and elaborations were introduced, but the basic idea remained the same. The moving panorama departed from these plans, of course, but as will be seen during the discussion of that device, as many of the illusionistic concepts as possible were retained.

Architectural plans for Barker's first panorama building are no longer extant. Figure 2, however, is a sectional view of a panorama building in Paris in 1842. This date is considerably later, of course, but the general structure and composition of panoramic exhibition buildings did not undergo any important changes throughout the century. This illustration, then, presents a reasonably accurate picture of the kind of building in which the earliest panoramas were displayed.

Little other information is available concerning the first panorama building, except that the large circle,
Figure 2

Section and Plan of the Panorama,
Champs Elysees, 1842

Reproduced from Zeitschrift fur praktische Baukunst,
II (1842), Plate I.
around which the panorama was suspended, was ninety feet in diameter:

In the year 1793 Mr. Barker took a lease of a piece of ground in Leicester Place and Cranbourne Street, where he erected the large exhibition-building in which the panoramas have been ever since, and are still, exhibited [1857]. The large circle is ninety feet in diameter, and the small upper circle is constructed within it, being supported by the center column. The entrance to the small circle is over the top of the picture in the large circle. The reference here to a "small upper circle" indicates that Barker's first panorama building had provision for the exhibition of two sizes of paintings: smaller ones such as he first experimented with in Edinburgh, and larger ones which filled the entire circumference of the building. The entrance to the smaller circle was over the top of the large painting, an unusual arrangement which was not attempted again in any future panorama buildings about which there is information. A souvenir program [see Figure 5 below] indicates that as late as 1816 this two-circle arrangement was still in operation. The Battle of Waterloo panorama covered the large, lower circle, and the Battle of Paris was arranged in the small exhibition hall above.

Figure 3 shows the interior of a French panorama building of about 1872. Again, while this illustration is

7Corner, *op. cit.*, p. 6.
Figure 3

Interior of a French panorama building (1872)

of a much later date, the basic scheme of these buildings did not change throughout the whole period of the panorama's popularity. This picture is included at this point to indicate the general size and scope of a typical, circular panorama. Note the masking device over the spectators' platform, and another running down from the platform below like a slanting roof. These prevented the observer from seeing the top and bottom of the picture. Note also the windows at the very top which allowed light on the painting but which could not be seen by the spectator.

Previous to opening his first panorama building in 1794, Barker exhibited a view of Edinburgh, in 1789, in make-shift quarters in the Haymarket, London. This was a smaller painting, the circle being only twenty-five feet in diameter. In 1792 he exhibited a larger panorama of the City of London in a rough building in Leicester Square. Sir Joshua Reynolds came to see this panorama and was much impressed. In 1793 Barker began construction of his permanent panorama building at Leicester Square, and in 1794 the exhibition opened with a view of the Grand Fleet lying at Spithead near Portsmouth. The painting covered about 10,000 square feet of canvas.

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8 Ibid., p. 14. 9 Ibid., p. 5.
King George III and the Royal Family were to see the exhibition before the public was admitted, and since a good name was considered essential for royal approbation, and for the commercial success of the experiment, Mr. Barker applied to his classically minded friends for a suggestion. They furnished him with the name, Panorama (πανοράμα: παν (all) + ὄραμα (view) = to view all). This name quickly caught the public fancy.

From that point on the chronicle of the panorama becomes a story of rapid expansion and development. As early as 1799 a Mr. Robert Ker Porter established a rival exhibit at the Lyceum. There he displayed three historical pictures: the Storming of Seringapatam, the Siege of Acre, and the Battle of Alexandria. These three pictures were three-quarters of a circle. The three-quarter concept, however, did not last. Practically all future panoramas were full circumference paintings.

Robert Barker died in 1806, at the age of sixty-seven. His son took over the exhibition and became a successful panoramist in his own right. In 1802, before his father's death, Henry Aston Barker went to Paris and drew a panorama of that city. A circular reproduction of this panorama is

10 Ibid., p. 7. 11 Ibid. 12 Ibid., p. 10.
illustrated in Figure 4. The date, 1815, indicates that this panorama, like many others, was occasionally revived. Note the peculiarly curved lines on the painting. These give some indication of the special perspective which Robert Barker had to work out when he first experimented with the panorama.

Henry Aston Barker's most famous panorama was the Battle of Waterloo, taken from sketches he made at the sight of the battle. Figure 5 is a reproduction of the panorama, handed out as a souvenir program at the exhibition. The Battle of Waterloo was so successful that Henry Barker was able to retire in financial comfort in 1826.\(^{13}\) He turned over the management of the Leicester Square Panorama to a Mr. John Burford. After John Burford's death in 1827, the exhibition came under the control of Mr. Robert Burford, his brother. Robert Burford had been a pupil of Robert Barker, and he later became one of the most successful panoramists of the nineteenth century.

The Barkers established the popular subject matter for panoramas: battles, naval engagements, historic

\(^{13}\text{Ibid., p. 12.}\)
Figure 4

Panorama of the City of Paris

Figure 5

Panorama of The Battle of Waterloo

landscapes, and famous cities. These were the subjects of practically all panoramas throughout the nineteenth century. The only other popular themes were religious stories, and even with these the treatment was largely geographical.

The panorama was introduced into France, oddly enough, by an American, the famous Robert Fulton. Fulton took out a French patent on April 26, 1799, for a term of ten years. On December 8, 1799, he disposed of his patent rights to James W. Thayer, another American. Fulton and Mr. Thayer then went about establishing the first panorama building in Paris.

A plot of land situated in a central position in Paris, on the south side of the Boulevard Montmartre, was secured, and upon it was erected a large building 14 m. (46 feet) diameter to contain the Panorama. The site is now indicated by the "Passage (i.e. an arcade, with shops) des Panoramas,"—with the exception of the "rue Fulton" near the Jardin des Plantes—the only vestiges in the city to remind those who know the facts, of Fulton's long stay there. The subject of the Panorama that he painted and completed early in 1800, was the "Burning of Moscow," not, of course, the fire which signalized Napoleon's invasion of Russia, for that did not take place until 1812, but an earlier one, of which so many are recorded in the history of Moscow in the seventeenth and eighteenth centuries. Doubtless Fulton chose his subject for this very reason,

14 A Chronological listing of most of the panoramas painted by Robert Barker and Henry Aston Barker will be found at the close of this study in Appendix A.

because he would be on very safe ground, and also because it offered an opportunity for a very lurid production. This was succeeded by another on the same site.

As indicating how popular the Panorama was, outlasting even the Republic itself, it is interesting to note that the concessionaires [Fulton and Thayer] on March 9, 1809, obtained a prolongation of their patent for five years, just when it was about to expire, so that it remained in force until April 27, 1814. It is interesting also, to find that Fulton, on April 26, 1801, obtained a second patent for fifteen years, for improvements in panoramas.¹⁶

The panorama became popular in Paris as it had in London. In typical Parisian fashion, a street ballad or music hall song became popular along with it. It went in part:

Paris more than any place
Rejoices in a legitimate success.
A clever man will show you it
For one franc fifty centimes.
And everybody goes or is going
To the pano, pano, panorama.¹⁷

Figure 6 shows the first Parisian panorama buildings established by Fulton and Thayer in 1800, next to the Theatre de Varietes.

It is not necessary to chronicle the spread of the panoramic entertainments throughout the rest of Europe.

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¹⁶Ibid., p. 96.
¹⁷Ibid., p. 97. The French original went:
Paris pas plus grand que cela
Jouit de succes legitime.
Un savant vous le montrera
Pour un franc cinquante centimes,
Et tout le monde donne ou donneurs
Dans le pano, pano, panorama.
Figure 6

Robert Fulton's Panoramas, Boulevard Montmartre, Paris (1802)

Suffice it to say that most of the large cities of Europe soon had panoramas, although London and Paris were always the most popular panorama cities. It is, however, worthwhile to note that a Professor Breysig, a German, published a work in 1798 entitled, *Skizzen, Gedanken-Umriss; Entwürfe, die bildenden Künste betreffend*. In this work he describes the process of the panorama, which has led some historians to believe that he was the original inventor. However, it is obvious that Barker's invention pre-dated Breysig's writing by over ten years. Besides, it does not appear that Professor Breysig ever constructed a panorama, and it is likely that he obtained his information on a visit to Barker's panorama in London, or through various published accounts of Barker's exhibition.\(^{18}\)

II. THE INVENTION OF THE DIORAMA

The diorama was invented by a Frenchman, Louis Jacques Mande Daguerre (1789-1851). He is best remembered for the invention of the daguerreotype, but he was also a man of wide artistic talents and interests. It is recorded that he invented the diorama in 1822,\(^{19}\) and, after showing

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it briefly in Paris in July, 1823, he exhibited it in London on September 29 of that same year in a building erected in Regent's Park. In 1824 he took out a patent on the device under the pseudonym of John Arrowsmith:

Recent Patents. To John Arrowsmith of Air-Street, Piccadilly, in the county of Middlesex, Esq., in consequence of discoveries by himself and communications made to him by certain foreigners residing abroad, for an improved mode of publicly exhibiting pictures or painted scenery of every description, and for distributing or directing the day-light upon, or through them, so as to produce many beautiful effects of light and shade, which he denominates diorama.20

The name diorama came from the Greek: δια (through) + οπαμα (to view) = to see through.21

Before proceeding with the diorama's precedents and early development, it would be well to establish more precisely the nature of the device. The Penny Magazine in 1842 presented its readers with a clear description:

The arrangement is somewhat as follows:--Let the reader conceive a circular room or rotunda, about forty feet in diameter, with two square openings or windows communicating with two rooms [see Figure 7]. At the farther end of each room, opposite the opening, is a very large picture, and the ceiling is provided with windows or lights susceptible of much change in arrangement. Within the rotunda is a smaller rotunda capable of rotating horizontally around its center; it is nearly equal in diameter to the outer one, but


Figure 7

Plan and Exterior of the Diorama, London

has only one opening instead of two. The ground of the inner rotunda is occupied by tiers of gradually rising seats for the spectators; and no light can gain admission but that which passes through the single aperture or window. The consequence of this arrangement is, that when the opening in the inner rotunda coincides with one of those in the outer one, the spectator can see the picture at the farthest end of the open room; but when the inner rotunda is so far turned as to bring its aperture away from both those in the outer rotunda, all is in darkness. Hence the spectator is allowed to see one picture, and then to see the other picture, by the platform on which he stands or sits being made to rotate.

This being the adjustment of parts, the whole illusive effect depends upon the position and character of the picture room. The ceiling, floor, and sides of this room are so managed as to be entirely hidden from the spectator, who, on looking through the opening, can see nothing whatever but the picture, which, really about thirty or forty feet distant, appears to be the object represented. The spectator being himself nearly in darkness, and light being thrown on the picture in a decided manner, produces an effect very different from that observed in ordinary pictures; and as the shutters of the skylight are so arranged as to diminish or increase the admitted light at pleasure, the change from ordinary daylight to sunshine, or from sunshine to cloudy weather, or the obscurity of twilight, or the various modifications of atmospheric colouring, may be imitated with great success. But in addition to these effects, others have been produced by making some parts of the painting transparent, and throwing on from behind various kinds and intensities and colours of light; and when these two classes of effects are combined, viz. those resulting from reflected light and those from transmitted light, scenes of extraordinary illusion are often produced.  

The diorama, then, was one more device to please the eye and deceive the senses. It differed considerably from the circular panorama in the important sense that it was a flat painting viewed by spectators seated in an auditorium, but it is clear that the purpose was the same: to give its viewers a startling illusion of reality. The diorama accomplished that purpose by using a mixture of translucency and opacity on its canvases:

A dioramic picture is painted on both sides. It is a large piece of lawn or calico, if possible without a seam, or at least with seams as little perceptible as may be necessary. The colours laid on the front of the picture are viewed by reflected light coming from a point above and between the spectator and the picture; while those laid on the back of the picture are viewed by transmitted light, emanating from a window behind. In painting the front, the "lights," or white tints, are left out, so as to admit the passage of light through the picture from behind; and even in the dark parts no body colours are used; for though they would show well by reflected light, they would appear as mere black irregular masses by transmitted light. While painting the front, the painter works by reflected light; but while painting the back, by transmitted light; because the effects intended to be produced can only thus be tested.

Generally speaking, when a dioramic scene is represented by day, and then by evening or moonlight, the day effect is painted on the front of the picture and the night effect on the back; and the admission of light is regulated according as the picture is to be viewed by reflected or transmitted light; in other words, according as it is to be a picture or a transparency.23

23 "Portable Diorama--Dissolving Views," The Penny Magazine XII (1843), p. 3.
For all of the diorama's popularity and beauty, it could not have been a truly startling innovation for Londoners. Those who witnessed De Loutherbourg's Eidophusikon during the latter years of the eighteenth century saw similar effects achieved in a similar manner:

The clouds in every scene had a natural motion, and they were painted in semi-transparent colours, so that they not only received light in front, but, by a greater intensity of the argand lamps, were susceptible of being illuminated from behind.24

Philippe Jacques De Loutherbourg was an important forerunner of the Daguerre diorama. It is even possible that his experiments were influential in Daguerre's development of the diorama, although there is no evidence that the two men were acquainted.

It should be noted that the diorama required more controlled use of light than did the panorama. The panorama was visible and effective as long as there was enough daylight streaming through the skylights onto the circular painting. The diorama, however, required regulation of the reflected light from in front and above and the transmitted light from behind. Figure 8 is a transverse section of a diorama, from Daguerre's original patent, showing the complex

24 W. H. Pyne, Wine and Walnuts: or After Dinner Chit-Chat (London: Longman, Hurst, Rees, Orme, and Brown, 1823), I, p. 286. See also Appendix B at the conclusion of this study for a more detailed description of dioramic painting techniques.
Figure 8

Transverse Section of the Diorama, London

system for controlling the light. The long line BB is the painting, with weights at the bottom to stretch it taut. The aperture DD at the rear of the building emits light behind the painting. The lever GH, resting on a fulcrum, controls lines going up to the skylights and back to the rear window to regulate shutters and tinted screens as desired. Later these effects were achieved with gas or electricity, but when Daguerre first established his Diorama in London's Regent's Park (1824), gas was just coming in and was probably not considered controllable enough to be used on such a large scale.

A letter sent to the editor of Mechanics Magazine in January, 1824, about three months after Daguerre's Diorama opened, describes the effect one spectator received:

... I anticipated the sight of a beautiful painting and well-preserved perspective, of which I was always passionately fond; but the admiration with which I was struck on beholding the Valley of Sarnen, and Trinity Chapel at Canterbury, in the Diorama, exceeded every emotion of the kind I ever felt before. The spectator is introduced into the amphitheatre while one of the paintings is exhibiting; and after he has surveyed it a short time, a bell rings, and the amphitheatre moves to the diameter of the circle, and in the motion the other painting gradually opens to the view. This motion is repeated about every ten minutes.25

According to the account, the spectator was shown three or four paintings every half-hour, being permitted to view each one about ten minutes. It seems strange to a present-day reader that a body of people could sit for such a relatively long period of time in a dark room and stare at one picture. But this is where the dioramic effects came into play. All manner of novelties were introduced to maintain interest: thunder, wind, snow, lightning, explosions, and fire. In the diorama described by the contented spectator above, a thundering waterfall was introduced into one of the pictures. All of these were achieved by the control of reflected or transmitted light on the canvas. Modeled foregrounds, containing three-dimensional objects, were also sometimes introduced, reminiscent of the early eighteenth-century exhibition by Christopher Pinchbeck.

Concerning these spectacular effects which supplemented the picture itself, it can well be imagined that the dioramists were content to borrow from the theatre. Certainly the sound effects were of theatrical origin, and probably some of the lighting effects required theatrical devices. Perhaps even with the earliest dioramas certain limited gas

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26 "Panoramas and Dioramas," Leisure Hour, XXXV, p. 45.

fixtures were installed to permit novel effects, such as fire and volcanic eruptions. In any case it is interesting to note that the diorama first borrowed from the theatre, only to have the theatre borrow many dioramic effects in a very short time. This was especially true of those dioramic displays which told something of a story. A typical dioramic picture, for example, might show a landscape of calm beauty, which would begin to darken and become clouded, followed by a tremendous storm with lightning and thunder, and then return to its original serenity. It was this kind of effect which was quickly recognized as valuable by theatrical showmen.

Mr. Daguerre's Regent's Park Diorama was a great success. It could offer more spectacle than the panorama, and because the paintings were smaller, they could be changed more frequently to keep the customers coming back for new exhibits. A notice in the Examiner of 1830 gives an indication of a typical dioramic program:

The Diorama, Regent's Park, is now open with Two New Views, The Interior of St. Peter's Church opposite the Choir, painted by Mr. Bouton [Daguerre's colleague]; and the Town of Thiers, in the department of Pay-de-dome, in France, painted by Mr. Daguerre. The time represented in the latter picture is seven o'clock in the morning; a light fog covers the hills, but the houses are enlightened at
intervals by the appearance of the sun; the water escaping from the river through the stones on its banks, and the smoke rising from a chimney, enliven the scene.28

It should be noted that the diorama was not limited to landscape scenes, as was the panorama. In the two descriptive accounts quoted above, reference was made to two scenes which were interiors: Trinity Chapel at Canterbury and St. Peter's Church. An interior view of the Chapel at Rosslyn was shown in 1826.29 The diorama, from these early dates on, continued to make the most of interior beauty: candle-light around an altar or sun shining through a stained-glass window.

Not everything was completely satisfactory with the dioramas, however. The paintings, with their transparencies and novel effects, must have often seemed gaudy and unrealistic, occasionally to the point of tastelessness. The painter, Thomas Allom, painted a panorama in 1849,

... of which it was said that his direct painting of moonlight and atmosphere was more satisfying than the contrived effects of those dioramists who relied on light from behind the canvas, through cut-out windows and transparencies, to reinforce their illumination, colour and drama.30

28 The Examiner, (January 11, 1830), p. 29.
Also, a description of the diorama in The Penny Encyclopaedia (1838), contains the statement that the rotating auditorium was something of a bother, once the novelty had worn off:

The peculiar mode . . . of turning the spectatory from one painting to the other, is adapted, as the scenes are much larger than the opening through which they are viewed, and require to be stretched upon a framing, so that they cannot be either rolled up, or drawn aside in two halves, as is done with scenes of a theatre.31

But the vast majority of spectators found the dioramic exhibitions interesting and exciting. The well-known epigram: "Literature is able to give a diorama of what it depicts, while art can give only a panorama,"32 is indicative of the more complex and multi-dimensional character of the diorama as compared to the panorama. The manner in which words are applied in vulgar usage is, perhaps, the clearest sign of public reactions; and it is known that by 1837 an odd development of meaning had occurred, whereby the adjective, "dioramic," had come to mean "the height of realism."33

31 The Penny Encyclopaedia (London: Charles Knight and Co., 1838), IX, p. 3
32 Merchant, op. cit., p. 107n.
33 Ibid., p. 107.
CHAPTER IV

THE CHARACTER AND SCOPE OF PANORAMIC AND DIORAMIC
EXHIBITIONS DURING THE NINETEENTH CENTURY

I. INTRODUCTION

To attempt an appraisal of the scope and popularity of all manner of panoramic and dioramic exhibitions during the nineteenth century is a difficult assignment. It would compare to a researcher, two centuries from now, attempting an appraisal of the character and scope of motion pictures in this present era. If such a person were to summarize by stating that the motion pictures were of many different kinds, sizes, shapes, and degrees of merit, he would be echoing the summation that must be given for the various panoramic exhibitions of a century ago.

As the century wore on, the variety of names and titles given to these exhibitions grew rapidly and imaginatively. The exhibitors were continually faced with competitions, and many of them attempted to interest prospective customers by embellishing the names of their exhibitions: names such as cosmorama, noctorama, dio-monorama, paleorama, caricaturama, and mareorama. As these appear in the discussion of this chapter an attempt will be made to explain
the manners in which they differed from the original panorama and diorama, but in most cases the difference was only in the name. The first of these mentioned above, the cosmorama, was, in its original development around 1820, a peep-show, in which the spectator looked into small, glass-covered windows and saw magnified pictures with interesting lighting effects inside. This compares to the penny-arcade peep-shows familiar today, although every indication is that the nineteenth-century varieties were more conventional in their subject matter. However, later in the century the name Cosmorama appeared in relation to exhibitions which were unquestionably panoramas or dioramas. The precise nature of the original term, in these cases, had been lost or discarded, and exhibitors began to capitalize on the prefix cosmos to advertise the superlative size and scope of their displays.¹ Thus the terminology for all of these representations became considerably mixed, and the exact character of the exhibition is often difficult to pin-point by reference to its name.

¹An article in The Penny Magazine (1842) explained the original Cosmorama: "Pictures of moderate size are placed beyond what have the appearance of common windows, but of which the panes are really large convex lenses, fitted to correct the errors of appearance which the nearness of the pictures would else produce. Then by using further subordinate contrivances calculated to aid and heighten the effects, even shrewd judges have been led to suppose the
It is the purpose of this chapter to suggest, in a chronological manner, the widespread popularity and representative character of the panoramas and dioramas from the beginning of the nineteenth century to the close of the panoramic era during the first several decades of the twentieth century. This chronology will be limited to the exhibitions in England and the United States, with a few references to French exhibitions. The emphasis, however, will be upon exhibitions in New York and London. The available information on panoramic exhibitions in New York is particularly rich because of George C. D. Odell's monumental *Annals of the New York Stage*.

In providing an over-all picture of panoramic activities during this period, continual references will be made to the moving panorama or moving diorama, for these forms eventually became more popular than the stationary varieties. However, at this time it is inconvenient to delve into the small pictures behind the glasses to be very large pictures, while all others have let their eyes dwell upon them with admiration, as magical realization of the natural senses and objects. Because this contrivance is cheap and simple, many persons affect to despise it; but they do not thereby show their wisdom; for to have made so perfect a representation of objects is one of the most sublime triumphs of art, whether we regard the pictures drawn in such true perspective and colouring, or the lenses which assist the eye in examining them." "On Cosmoramas, Dioramas, and Panoramas," The Penny Magazine, XI (1842), p. 364.
background and usages of the moving panoramic devices. This information will be fully brought out in the following chapter. For the present it need only be noted that panoramic paintings were frequently rolled up and displayed in a laterally moving fashion in front of the spectators. When the usual dioramic effects were added, they were often called moving dioramas.

Every opportunity will be taken in this chapter to point out the relationship of the panoramic exhibitions to the similar panoramic forms which were used in the theatres. Every usage or effect which can be found in connection with panoramic exhibitions is a source of important information about theatrical panoramic scenery. The following chronological commentary on panoramic exhibitions, while not exhaustive, provides an accumulation of data on the panorama's scope, effects, popularity, and influence which is applicable to the theatrical panorama for the same period. The examples have been chosen with regard to their typical qualities, and to such qualities which appear to indicate a new departure or a trend.

II. SURVEY OF THE PANORAMIC ERA

A brief article in Chambers Journal for January, 1860 states that 124 panoramas were exhibited in London between
the years 1788 and 1860. This is an extraordinary under-
statement, and the author of the article must certainly have
been referring to only one specific type of panoramic device—
perhaps the large circular panoramas in the rotunda-like
exhibition halls. For any totalling of the number of pano-
ramic and dioramic exhibitions during that period would
easily triple that figure, and even then it would be a modest
estimate. Around 1850 there were fifty panoramas alone in
the city of London within a few years of one another. If
that is a typical figure for the mid-nineteenth century, it
must be remembered that it does not include stationary pano-
ramas and dioramas, nor does it take into account various
other panoramic exhibitions of one kind or another. It
would not be inaccurate to estimate that the number of pano-
ramic or dioramic exhibitions during any year toward the
middle of the last century would be comparable to the number
of new motion pictures annually released during any year of
the mid-twentieth century.

The major panoramic exhibitions in London through the
first two decades of the nineteenth century have already

2"Panoramas," Chambers Journal, n.s. XIII (January-
June, 1860), p. 35.

3H. Southern, "The Centenary of the Panorama,"
been recorded in Chapter III. These included the work of Robert Barker, his son, Henry Aston Barker, and their colleagues and earliest competitors. An account has also been made of the first dioramic exhibition by Daguerre in 1823. It will be helpful now to turn to the story of panoramic and dioramic developments in the United States and then to move back and forth between New York and London as the most interesting unfoldments occur. New York and London are chosen particularly, of course, because of the more accurate and abundant evidence which is extant and available concerning these two centers of entertainment.

To begin, on April 9, 1790, the entertainment at New York's William Street theatre ended with "a display of transparent scenery." This was well before the introduction of the diorama, of course, and indicates that an exhibition similar to De Loutherbourg's Eidophusikon was also available to New Yorkers. American and English tastes during this period shared a partiality toward landscape painting and illusionistic displays. It is possible that the William Street exhibition of "transparent scenery" was an American version of De Loutherbourg's representation of a few years before.

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In April of 1795 there was a panorama of Westminster and London, including the Three Bridges, displayed at an establishment on Greenwich Street. This was only one year after the opening of Robert Barker's first panorama building in London, indicating that the Americans were not far behind the English in discovering a taste for this kind of entertainment. The idea for this Greenwich Street panorama was undoubtedly borrowed from Barker's exhibition. The same establishment advertised a panorama of the City of Charleston in February of 1797, announcing that the painting was 110 feet long, 20 feet high, and covered 200 square feet of canvas. This was a relatively small exhibition, comparable to Barker's first panorama of Edinburgh. In November of 1797 the panorama of Westminster was displayed again.

In January of 1802, a Mr. Alexander Fink of 39 Chatham Street in New York, advertised a panorama of Jerusalem. Competition was on the increase.

New York's first panorama exhibition building, constructed especially for displaying the large circular paintings, opened in October of 1804, at Broadway and Reed Streets, with Robert Ker Porter's panorama of the Battle of

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5 Ibid., I, p. 398.  
6 Ibid., I, p. 443.  
7 Ibid., II, p. 33.  
8 Ibid., II, p. 143.
Alexandria. This was the same Mr. Porter who became Robert Barker's first competitor in London in 1799. One of his paintings had been shipped to New York for the opening of the new exhibition hall. The painting covered 3000 square feet of cloth, which was bigger than previous New York panoramas but still not as large as Barker's Leicester Square paintings, which averaged 10,000 square feet. In December, 1804, the same establishment advertised a panorama of the Battle of Lodi.

An exhibition of a "circular view of New York" was given at 38 Fair Street in the Autumn of 1807. This was the first panoramic view of New York City.

In December of 1810, a panorama of the City of Rome was advertised by the New York Museum at 166 Greenwich Street, and in early October, 1811, a panorama of the City of Boston was displayed at an unspecified site. In January, 1812, a "New Mechanical Panorama" was exhibited at 190 William Street, consisting of a landscape with mechanical animals and vessels in front. The employment of two-dimensional or three-dimensional objects in front of the panoramic paintings became increasingly popular throughout the century.

9Ibid., II, p. 239. 10Ibid. 11Ibid.
In December of 1812, at Broadway and White Streets, there was a panorama of the City of Paris. This was very likely Henry Aston Barker's original panorama of Paris, first exhibited in London in 1803, and imported to New York by an enterprising panoramist. It was followed in the same year by a panorama of Liverpool.

March of 1814 was enlivened by "Stollenwerk's Mechanical Panorama," another early attempt to make the panoramas more interesting through animation. A panorama of the Victory of Perry on Lake Erie was displayed in June of 1814. This was part of a trend in panoramic exhibitions from their very beginning. Recent military events were used as the subjects for the paintings. The spectators must have regarded them in somewhat the same manner as newsreels are regarded today. The recent War of 1812 was further exploited with a panorama of the Naval Engagements on Lake Champlain and the Land Engagements at Plattsburgh, both showing in October, 1815, at Ross's Building, 2 Fair Street. These were followed in 1816 by the inevitable panorama of the Bombardment of Fort McHenry, at Mr. Reeds's.

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By the year 1816, panoramic exhibitions were well established in New York.

Panoramic activities kept pace in London during this period. In 1817 a program for The Theatre of Arts, Spring Gardens, offered an entertainment which was:

... quite distinct from that of a Theatrical Description, and on this Account, together with its surprising Ingenuity and Harmless Tendency, is peculiarly calculated to attract the Notice and Support of those whose Religious Tenets forbid their Participation in Amusements of a more marked and decisive character.22

This panorama consisted of six pieces, four of which were panoramic-dioramic in character, with natural visual and sound effects. The other portions of the entertainment were rope dancing and singing. The announcement of this activity is the first clear indication that the panoramic exhibitions were replacing the theatre for those people who possessed a militant moral attitude against the theatre. It is also an early reference to a panoramic exhibit being held in combination with live entertainments.

Henry Aston Barker had displayed his famous panorama of the Battle of Waterloo in London in 1816. On November 4, 1818, a Battle of Waterloo panorama was exhibited in New York,
at a location Near Broadway and Franklin Streets. This was not H. A. Barker's painting, however, since it was much smaller. A panorama of the Battle of Algiers was shown at the same establishment in December of 1818.

In listing the panoramic exhibitions in New York for 1818, Odell comments that the number and variety of panoramas were growing steadily. He also notes that a representative number of them were worth recording for they were certain to have an effect upon stage scenery.

In the Autumn of 1818 a new panoramic exhibition building was operating in New York. It was called the Rotunda and during the 1818-19 season it featured the Battle of Paris, the Battle of Lodi, and the Palace and Garden of Versailles.

In London, about 1819-1820, the Great Room at Spring Gardens advertised a "Novelty!"

Marshall's Grand Historical Peristrephic PANORAMA of the ceremony of the CORONATION, The Coronation Procession, and the Banquet of His Most Gracious Majesty King George the Fourth; Painted on 10,000 Square Feet of Canvas and displaying nearly 100,000 figures, 500 of the principal characters in

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the Foreground the size of Life. A full military band will perform the Coronation Music during the Evolutions assisted by a Finger Organ, Trumpets, &c. 27

This was a moving or peristrephic panorama. The advertisement went on to state: "This interesting MOVING PANORAMA is now open in the Lower Great Room." The use of capital letters in the advertisement, and the employment of the word, "Novelty," indicate that around 1819-1820 the use of a moving panorama was new and different enough to attract public interest on that count alone. It is also interesting to note that this exhibition had assumed the scope of a spectacular production, including not only a mammoth painting with life size figures in the foreground, but a full military band. This could almost be called staging a panorama.

Beginning in July, 1820, a new panorama, The Surrender of Cornwallis, was exhibited by the American painter, John Trumbull, at Washington Hall; 28 and the New York Rotunda during the 1820-1821 season capitalized on past successes: The Palace and Garden of Versailles, 29 the Battle of Waterloo, 30 and the City of Paris. 31 Popular panoramas,

27 OSUTC Film 1468, Clipping, New York Public Library Theatre Collection.
28 Odell, op. cit., II, p. 571. 29 Ibid.
30 Ibid., II, p. 598. 31 Ibid., II, p. 608.
like popular plays, were continually being revived. The Battle of Waterloo in particular reappeared regularly and must have been the early nineteenth century's own Gone With the Wind.

Henry Aston Barker's panorama of the City of Athens, which had been displayed in London for the first time in 1822, was exhibited at the New York Rotunda in 1827. Barker's works were as popular in America as they were in England.

New York witnessed its first moving diorama at the Spectaculum during February of 1829. In May of that year a diorama was exhibited on Broadway, followed by an unspecified stationary diorama of the Thames Tunnel in September, 1830. In December of 1830, Niblo's Garden, normally a center of summertime entertainment, exhibited a "Grand Peristrephic Panorama," comprised of connecting views of the Battle of Navarino.

During this period the moving panoramic and dioramic exhibitions were growing in popularity. It is probable that the moving varieties were less interesting artistically

32 Corner, op. cit., p. 15.
than the large circular panoramas or the stationary dioramas. They could not be staged as effectively and, because the pictures passed rapidly before the spectators, the painting very likely lacked much of the technical perfection lavished upon the circular panoramas.

Yet, the moving forms had certain advantages which bolstered their popularity. They could be set up in almost any room of sufficient size to hold an audience and did not require the expensive construction of a special building. Niblo's Garden, as has been noted above, took advantage of the panorama's popularity by exhibiting the moving type, whereas the circular kind would have required major renovations and expenses. Also, the moving panorama was easy to transport from city to city, which vastly increased its potential market. Furthermore, the movement of the cloth was not only a novelty feature, but this allowed the panorama to be almost any manageable length desired. It was not restricted to the circumference of a large circle, and its painting required no special adaptations of perspective. Finally, the moving panorama could represent a horizontal scene, such as the length of a river, allowing a great deal more variety than the stationary, circular panoramas, which were restricted to a full circumference view taken from one central point. The moving panorama, then, was
highly adaptable and transportable, which allowed a significant increase in the number of exhibitions available to an intrigued public. Concerning the success of all panoramic forms during this period, Odell writes: "Our forefathers were at least interested in the art pictorial; the papers of the early 30's bristle with advertisements of exhibitions of paintings."37

New Yorkers, in 1835, were able to indulge their pictorial tastes in a moving panorama of the Battle and Village of Waterloo,38 giving a peristrephic treatment to that popular subject. There were also four moving dioramas at the City Saloon,39 and a moving panorama in Brooklyn which was advertised as being run by steam.40

1838 saw the opening of a new panorama building in New York. It adjoined Niblo's Garden and featured the City of Jerusalem and Niagara Falls,41 both of which were increasingly popular panoramic subjects. A moving diorama of the Battle of Bunker Hill was displayed in August, 1838, at the New York Masonic Hall.42

In 1839 there appeared in Boston the first panorama of the Mississippi River. It was a moving panorama, of

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37Ibid., III, p. 537. 38Ibid., IV, p. 43
39Ibid. 40Ibid., IV, p. 49.
41Ibid., IV, p. 257. 42Ibid., IV, p. 324.
course, and was painted by Mr. John Rowson Smith. The painting was said to have been four miles in length, and Mr. Smith toured it in this country and abroad for many years to great applause. \(^3\) This was the first of a whole series of moving panoramas and dioramas of the Mississippi River. The Mississippi and its tributaries became one of the most popular panoramic subjects of the century.

Odell reports that during the 1839-1840 season eight new panoramas were introduced in New York, with several dioramas still running from the previous season. \(^4\) There is little evidence from this period as to the appearance of the various panoramic and dioramic exhibition halls which were constantly being constructed and advertised. Figure 9, however, shows a London building of about 1840, which exhibited the diorama and cosmorama. This diorama was evidently a moving one for there appears to be but one picture-framing portion of the building, in the roof of which the skylights can be seen. The little side entrance to the right was probably the cosmoramic exhibition, comprised of peep-hole pictures, and advertised in the illustration as "Lithographic Establishment."

\(^3\) L. Heilbron, "Making a Motion Picture in 1848," *Minnesota History*, XVII (June-December, 1936), p. 133.

\(^4\) Odell, *op. cit.*, IV, pp. 419-420.
Figure 9

Exterior of Diorama Building, London (c. 1840)

Reproduced from OSUTC Film 1443*, frame 81. Original in the Harvard Theatre Collection.
DIORAMA

COSMORAMA

LOTHIAN ROAD

Open daily, from 10 o'clock A.M. till dusk.

Admission to the whole, 1d.

Children half price.
It is interesting to note the statement in the advertisement that the exhibition was "Open daily from 10 o'clock A.M. till dusk." These were the usual hours of operation of the dioramic exhibits during the early part of the century, for the effective illumination of the paintings required daylight.

In compiling his listings for 1842, Odell was startled to find no references at all to panoramas or dioramas during August of that year.\(^4\) This was a vacation month, of course, but Odell's surprise is understandable during this period of panoramic abundance. Early in 1843, however, Barnum's American Museum advertised a diorama of a Portuguese landscape near Lisbon, which included the sea, a storm, a ship-wreck, and a Fairy Grotto.\(^5\)

A three-mile long panorama of the Mississippi River by the famous American panoramist, John Banvard, was exhibited all throughout 1848 at the New York Panorama building, and was later toured in Europe.\(^6\) This was perhaps the most famous of all Mississippi panoramas, bringing to its painter international fame and fortune. Figure 10 shows Banvard exhibiting his Mississippi panorama before Queen Victoria at Windsor Castle.

\(^4\)Ibid., IV, p. 586.  \(^5\)Ibid., IV, p. 667.  \(^6\)Ibid., V, p. 402.
Figure 10

John Banvard Presenting His Mississippi Panorama
Before Queen Victoria At Windsor Castle

Reproduced from Minnesota History, XVII (June-December, 1936), p. 135.
John Banvard Presenting His Mississippi Panorama before Queen Victoria at Windsor Castle

[From Description of Banvard's Pilgrimage to Jerusalem and the Holy Land (1853).]
During the 1848-1849 season in New York, Odell lists fifteen new panoramic exhibits.48

A few critical reactions are available concerning several exhibitions in London during this period. Robert Burford's panorama of Grand Cairo, in 1847, prompted one critic to complain that the painting was beautiful but flat and lifeless.49 Perhaps he had been too much conditioned by the lively character of dioramic art. Burford displayed another panorama during that same year: the panorama of the Himalaya Mountains, which must have been a highly imaginative representation. The critic in this case labeled the painting "sublime," and commented that the landscape panoramas were better than those depicting a city.50 Burford's panorama of the destruction of Pompeii was re-exhibited in 1848, having first been displayed in 1823. A critic commented that it was still as good as ever,51 attesting to the perennial popularity of those panoramas showing battles and catastrophes.

A "very fanciful and real" representation of the City of Lisbon in the throes of an earthquake was shown at an

48Ibid., V, pp. 499-500.
49Art Journal, IX (1847), p. 46. 50Ibid., p. 301.
exhibition hall adjoining the Colosseum in London in 1848.52

The Colosseum was a circular panoramic exhibitorium, coupled with a hall for moving panoramas. Figure 11 illustrates the exterior of the Colosseum as it appeared around 1840. It appears to have been a stately edifice, worthy of the popularity of panoramic art in the mid-eighteen hundreds.

The representation of the City of Lisbon, noted above, was called a Cyclorama. This was a very early use of this word. The exhibition was of sufficient novelty and interest to draw critical attention:

The arrangement of the building, in every respect, corresponds with that of a theatre—with its range of boxes, parterre or pit, and stage . . . [see Figure 12].

The Cyclorama, which the company assembled in this saloon or theatre to witness, is a moving picture of the most striking scenes and incidents in the terrific spectacle of the great earthquake of Lisbon in 1755 . . . .

When these events are exhibited with all the aids of scenic and mechanical effects, the painter and the machinist achieve a great triumph in their arts.

The progress of the Panorama is accompanied with musical illustrations . . . on the new instrument described as "a grand apollonicon [organ]."53

52 Ibid., p. 627.

Figure 11

Exterior of Colosseum, Regent's Park,
London (1840)

Reproduced from OSUTC Film 1443*. Original in the Harvard Theatre Collection.
Figure 12

Interior of the Cyclorama, London (1848)

Reproduced from The Illustrated London News, XIII (December 30, 1848), p. 428.
Several aspects of this exhibition should be emphasized. It was called a Cyclorama, but it was evidently a moving panorama with dioramic effects. Perhaps the Greek prefix *cyclos* was used because the painting progressed in a circular fashion around the City of Lisbon. The reference to the machinist indicates that these effects were probably of a very striking and elaborate order. It is also clear that this representation was strongly influenced by the theatre, where the moving panorama had been employed frequently since the second decade of the century. The musical "illustrations" were undoubtedly also influenced by the theatre where the orchestras often accompanied scenic spectacles with appropriate music. The Cyclorama, in this case, was very much like a theatrical performance, except for the absence of actors. All this would seem to indicate that the panorama was borrowed by the theatres and incorporated into plays, only to have the panamist re-borrow the theatre's panoramic effects and display them in their exhibition halls. The painting in front of the assembling audience in Figure 12 is not the Cyclorama but a front drop scene.

Returning to the United States, another panorama of the Mississippi River was being toured throughout the country in 1849. This one was painted by Leon D. Pomarede, a French
painter who came to America in 1830. The continued interest in panoramic representations of the Mississippi has been attributed to the Americans' vigorous interest in the opening up of the new national frontiers:

These early exhibitions furnished the people pictorial information about their country and at the same time provided them with delightful entertainment. The western regions were being opened for new settlements, and various elements of the population were moving in that direction to take possession of the promising continental empire. The new geography held the intense interest of all those who travelled over its vast areas and witnessed its rare sights, and it also attracted the eager attention of those in the East and far away places who were looking for new homes in the great West. Artists especially were fascinated by the grand scenery of the western valley; its endless rivers, its boundless plains, its vast forests, and its lofty mountains. Soon they began to depict the most interesting features of the new country in colorful panoramic views upon extensive rolls of canvas.

Pomarede's panorama of the Mississippi encompassed 625 yards of canvas and was valued at $16,000. Painted in St. Louis, where many of the Mississippi panoramas were painted, Pomarede first toured his painting to New Orleans, then Havana, then throughout many eastern cities, and finally came to New York and Newark, where the panorama was

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55 Ibid.
destroyed by fire on October 15, 1850. There would always be more panoramas of the Mississippi, of course, but Mr. Pomarede's had achieved great popularity because of its special dioramic effects:

Novel devices contributed to the illusion of river traffic. The steamboats puffed along, the Indian canoes were paddled by. The illusion is rendered more nearly perfect by the appearance of the mimic steamboats, which are seen traversing the river and blowing off steam in a real high-pressure style. These were Mechanical Moving Figures entirely separate from the painting. All were moved by machinery, driving out thick black smoke from its heated furnace, and emitting steam from their steam or escape pipes; also canoes, flatboats, and every grade of water craft are seen moving, entirely detached from the canvas.\footnote{Ibid., p. 264.}

This was indeed a complex panoramic exhibit. One may wonder how much time or interest the spectators gave to the painting when their attention was so continually distracted by the mechanical objects and figures. Undoubtedly the whole was arranged to afford picturesque views interspersed with special effects. Such an arrangement would be necessary mechanically if for no other reason, for the machinists would have had to have time to prepare each special display.

There is, unfortunately, no information available on how the mechanical effects were achieved. It can be surmised, however, that they were accomplished in two ways: (1) Some
of the figures, such as canoes and flatboats, were pulled across the platform in front of the painting. If the painting moved from left to right, these small river crafts could have moved from right to left, giving the impression of fast movement. This technique was later used in the theatre for the horse-race melodramas, and it is probable that the mechanical effects used in the Mississippi panoramas were significant precedents for these races. (2) The second manner of working such effects would have involved gauze cut-outs in the panorama cloth at various intervals, through which the audience could have viewed the mechanical representations. Behind the moving cloth there would have been considerable and convenient space to arrange the mechanical effects, such as the smoke-belching steamboats. A mechanical steamboat, with smoke billowing from its stack and its sternwheel rotating, would not have needed to move in order to appear in movement as long as the panorama with gauze cut-outs was moving in front of it.

Some of the effects may have been achieved by stopping the movement of the cloth altogether and allowing time for a full display of dioramic effects behind transparencies and cut-outs. Such a technique would have been useful when the

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57 See Chapter V.
panoramic boat, upon which the spectators were supposed to be riding, stopped along the bank to witness a prairie fire in full fury. At any rate it is clear that these exhibitions were full and elaborate productions, requiring considerable apparatus and a sizeable crew of workers to handle them.

Returning briefly to London, it is noteworthy that Robert Burford, in 1851, displayed a "Christmas Novelty" during the holidays. It was a view of the Lake and Town of Lucerne and was exhibited at Burford's Leicester Square Panorama. There is no indication of what was particularly novel about the exhibition, but the fact that it came at Christmastime indicates that the panoramists had their Christmas specialities, just as the theatres had their pantomimes.

Seven new panoramas were introduced in New York in the 1850-1851 season according to Odell, but he admits that he does not list them all. "A journey up Broadway," writes Odell, "was in those days like circling the globe," so numerous were the panoramas. Of special note, during December of 1851, was the opening of a "counter-moving"

58 Arrington, op. cit., p. 265.
60 Odell, op. cit., VI, pp. 82-83. 61 Ibid., V, p. 584.
panorama of London.\textsuperscript{62} The effect of this device can only be conjectured. Most likely it was a novelty, in which one panorama of a river bank moved in one direction, while the other panorama of river boats moved in the opposite direction. In any case the advertisement of such an exhibition points up the imaginative and experimental nature of panoramic activities during this period.

For the 1852-1853 season in New York, Odell lists eleven new panoramas,\textsuperscript{63} including "Professor Hart's Moving Panoramic Mirror of the New Testament and Scenes in the Holy Land."\textsuperscript{64} This was instructive, inoffensive fare for the non-theatre-going family.

In this connection, an interesting new name was added to the New York oramas in 1853 by John Banvard, the aforementioned painter of one of the Mississippi panoramas. It was called the Georama and was possibly modeled after an earlier French exhibition of the same name.\textsuperscript{65} The subject matter, however, was in the mainstream of American and English panoramic art. It was a magnificent panoramic tour through the Holy Land:

Mr. Banvard . . . has recently constructed a magnificent and spacious gallery expressly for the

\begin{itemize}
  \item \textsuperscript{62}Ibid., VI, p. 177.
  \item \textsuperscript{63}Ibid., VI, pp. 262-263.
  \item \textsuperscript{64}Ibid., VI, p. 262.
  \item \textsuperscript{65}L'Illustration, (May 2, 1846), p. 133.
\end{itemize}
exhibition of his monster painting of the HOLY LAND, in Broadway,—adjoining the Metropolitan Hotel—which, since its opening, has been nightly filled with the most intelligent audiences. The dimensions of the Georama building are 150 feet in length, 40 in breadth, and 60 feet high; but the height is shut out by a canopy of dark cloth, coming down to the top of the painting—the walls, seats, &c. are also painted dark, as they should be, to give the proper effect to the picture. A spacious and magnificent vestibule leads to the Georama, paved in mosaic. The HOLY LAND is now the lion exhibition of the city, and one can have an idea of its real merits and popularity, when clergymen recommend it from their pulpits to their congregations, advising them to go and study it—a circumstance never known in a christian community before.66

Figure 13 is an interior view of Banvard’s Georama building. The drawing shows a sizeable audience watching the huge painting as it passed along. The painting itself at this point appears to be the interior of a church or temple. The opening through which the painting was viewed exposed 1200 feet of canvas at one time, and the panorama was advertised as using four times the canvas of Banvard’s Mississippi panorama, which was three miles long.67 The increase in canvas, however, was probably due in large part to the height of the painting, for a twelve-mile long panorama might have stretched the attention of even the most devoted spectators to the breaking point.

66 OSUF Film 1468, Clippings, from The New York Public Library Theatre Collection.

67 Ibid., clipping.
Figure 13

Interior of Banvard's Georama, New York (1853)

Reproduced from OSUTC Film 1468, Clippings. Original in The New York Public Library Theatre Collection.
The exhibition was called the Georama because its panoramas were geographical travelogues concerning interesting locales all over the world. Banvard's painting was not only instructional, but it is said to have possessed artistic merit:

Mr. Banvard, by introducing these edifying and instructive paintings had created a taste for the beautiful among the masses, who heretofore cared little, comparatively, for such works, and he had advanced the cause of the arts to a greater degree than any single individual since the origin of painting.  

This last statement may be granted some validity if Banvard's artistic contribution is considered in terms of selling panoramic art to the middle-classes. Exhibitions such as the Georama appealed to two types of people: (1) the artistically naive and (2) the religious zealots who considered the theatre immoral. Other people patronized the exhibits, but these two groups, often one and the same, comprised the vast majority of the audiences. The frequently religious subject matter was simple good business, and the gaudy spectacularism of most of the representations was necessary if the audiences were not to become bored with the mere painting. This is not to say that the paintings were poor, however. They were probably as effective as...

68 Ibid., clipping.
scenic art in the theatre. Many of the panoramists were also scene painters, and their task was to paint views which gave a believable illusion of realism to an audience sitting at some distance. With the moving panoramas especially, the need was to give a quick, entertaining impression, rather than a long, lasting satisfaction.

A most interesting statement is included in the description of the Georama quoted above. It is: " . . . the height of the auditorium is shut out by a canopy of dark cloth, coming down to the top of the painting--the walls, seats, &c. are also painted dark, as they should be to give the proper effect to the picture." That is to say, in order for the illusion to be effective, the auditorium had to be in darkness, and all distractions surrounding the audience had to be removed. This was a feature of panoramic and dioramic exhibitions which some spectators found annoying. A writer for All the Year Round, in 1867, complained of " . . . the Cimerian gloom to which the character of the show inevitably consigns its audiences."69

The darkness was necessary for two reasons: (1) The proper dioramic effects could not be achieved unless the painting itself was the only illuminated object in the hall.

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69"Moving (Dioramic) Experiences," All the Year Round, XVII (March 22, 1867), p. 304.
Even the earliest dioramas, in which the audience was rotated from one large picture to another, used light only on the painting, not in the spectatorium. The subtle changes of light behind the transparencies would not be convincing if any unintended light came from the front. (2) The objective of the panoramist was always to give the spectator a complete illusion of reality. This could not be accomplished unless all distractions were removed from the spectator's line of vision. He was not to have anything to relate to except the painting:

There are several curious and distinctive points involved in the process of deception whereby a flat painted surface is made to represent existing objects. When we look at a well-printed picture, bordered with a frame and hanging up at the side of a room, we do not mistake the object at which we are looking, because there are certain accessories at hand which can only pertain to it as a picture; but if these accessories are removed, the mind is more and more prone to be deceived in proportion as the artist is skillful. If the perspective be accurate, if the colours of the objects represented correspond with those observed in nature, if the grouping and general arrangement be natural, and if attention be paid to the modifying tint which results from the state of the atmosphere at different times of the day, the eye will be affected and through it the mind, nearly in the same way as by the original objects themselves. But in order that this effect may be wrought, the eye must not be distracted by other objects which can only belong to the picture and not to the original.70

The darkened auditorium, then, along with the dark canopy above and the dark decorations throughout, allowed that the spectators' eyes would not be distracted from the illusion of the painting by the setting of the painting.

It is Henry Irving who is usually credited with the consistent darkening of the auditorium while a play was in progress.\textsuperscript{71} Up to that time no such convention had been established in the English theatres, and although the introduction of gas lighting during the early decades of the nineteenth century permitted dimming of the lights in the auditorium, audiences sat in total darkness only when viewing dioramas.\textsuperscript{72} There is no evidence that the dioramic exhibitions influenced the theatres in this matter, except that spectators were conditioned by the dioramas to accept a darkened auditorium as a necessity for the full appreciation of pictorial illusion.

Continuing with the chronology, a panorama of Mont Blanc in April, 1853 was accompanied by a lecture by the comedian, John E. Owens,\textsuperscript{73} which was an attempt to bring


\textsuperscript{72}There are earlier instances of auditoriums being darkened (viz. \textit{The Fiend Father}, Covent Garden, 1832), but these were special occasions, indicating a novelty not a convention.

\textsuperscript{73}Odell, \textit{op. cit.}, VI, p. 263.
some humor into the panoramic program. Most certainly it was inoffensive humor.

Commenting on the 1854-1855 season in New York, Odell notes the introduction of only three new panoramas and writes: "The panorama craze was dying out, methinks." But this was not true. The peak of interest in panoramic entertainments may have been reached a few years earlier, but the panorama was to remain popular for the rest of the century. In June, 1855, a church on Prince Street advertised J. N. Still's diorama of Uncle Tom's Cabin. This was not a play, but a travelogue through Uncle Tom-land, and it undoubtedly possessed political and emotional overtones.

"The largest moving panorama in the world" was exhibited at the Chinese Rooms, Broadway, in New York in 1855. The program was divided into three sections, indicating that the panoramic picture was in three large rolls, which had to be changed at intervals like film reels for a motion picture. This panorama was called the Tour of Europe, which was reason enough for its great length, and was painted by John Rowson Smith, painter of the first Mississippi

74Ibid., VI, p. 412. 75Ibid.

76"Descriptive Book of the Tour of Europe," OSUTC Film 1468, The New York Public Library Theatre Collection.
panorama. The Tour of Europe panorama covered 30,000 square feet on canvas and cost $10,000 to complete.\textsuperscript{77}

Panoramic exhibitions were quick to pioneer new advertising methods to spark interest. An advertisement in the New York \textit{Herald} for January 3, 1857, read: "Oh, Papa, do make us to see the beautiful Fairy Grotto, and the Great Diorama of the Russian War, at the Chinese Buildings, this afternoon at 3 o'clock."\textsuperscript{78} This probably comes under the category of pleas which no child ever pleaded, but present-day readers will not be unfamiliar with the technique.

In 1858 the New York-German Volksgarten advertised a panorama of the East-Indian War, accompanied by farces.\textsuperscript{79} By this time theatrical entertainments, such as pantomimes, often included panoramic displays. Sometimes these were loosely connected to the plot of the entertainment, but often they were simply offered as \textit{entr'acte} or after-piece spectacles.

The London Cremone Gardens, in 1860, was showing "... a novelty in dioramic or panoramic painting which has received the title of Stereorama."\textsuperscript{80} The painting was very large and occupied an immense building. No information

\textsuperscript{77}\textit{Ibid.} \textsuperscript{78}Odell, \textit{op. cit.}, VI, p. 593.

\textsuperscript{79}\textit{Ibid.}, VII, p. 176.

\textsuperscript{80}Untitled clipping, folder of clippings marked "Panorama," in The New York Public Library Theatre Collection.
has been supplied concerning its novel effects, but the name Stereorama points to the use of solid, three-dimensional figures and objects in connection with the painting. If this was the case, the Stereorama was a novel name but not a novel exhibit.

Writing about panoramic activities in New York during the early Civil War years, 1860-1862, Odell comments:

"Panoramas were either largely absent or unadvertised," and "Panoramas were apparently somewhat in eclipse." But this was only a temporary respite, due perhaps to the economic stringencies at the beginning of mobilization. During the 1862-1863 season six new panoramas were exhibited in New York, and at least several of these capitalized on the war interest for their subjects. In December, 1862, Niblo's Garden displayed a Polymorama of the Present War, which derived its name from its mixture of many unrelated war scenes from all over the battle area. Also in 1862, John Banvard displayed a panorama in New York which was bound to be successful. It was called The Mississippi and the Historical Section of the War on Its Banks. Short of having the Civil War fought in

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81 Odell, op. cit., VII, p. 364.
82 Ibid., VII, p. 444. 83 Ibid., VII, p. 525.
84 Ibid. 85 Ibid., VII, p. 536.
the Holy Land, the next best thing for the success of panoramic representations was to have it fought along the Father of Waters.

Still during the war, in December, 1863, a New York exhibitor offered a panoramic-dioramic display called The World, or Creation and Deluge. There was nothing unusual about this type of religiously oriented panorama in the 1860's, except to note that no subject in the whole development of illusionistic representations had been more consistently popular. It will be remembered that as early as 1681 a representation called Creatio Mundi, or The World Made in 6 Days, was exhibited in London. Even the titles of such exhibitions remained much the same.

No survey of panoramic activities during this period would be satisfying without some indication of the nature of a typical program and audience. In this connection it is fortunate that an anonymous writer for All the Year Round, in 1867, troubled to write some of his diôramic reminiscences from his childhood and maturity. This delightful essay brings into focus some of the excitement, beauty,

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86Cf. Chapter II, p. 32.
and silliness of which most dioramic displays were comprised.

The author began with a sketch of the audience:

The diorama is a demesne that seems to be strictly preserved for the virtuous and good. Those for whom the gaudy sensualities of the theatre are interdicted may here be entertained with the mild and harmless joys of an instructive diorama. At the doors going in, we may see the quality of the guests—benevolent-looking elderly men, dry virgins, a clergyman or two, and portly mammas with a good deal on their minds, who have brought the governess and all their young family. 87

Remembering the delights of his own childhood, the author commented:

A really good panorama is a high treat, and for the young an entertainment second only to the pantomime. Parents should encourage this feeling, instead of serving out those little sugar plumbs, which are so precious to a child, as if they were dangerous and forbidden fruit, which might corrupt the morals and corrupt the soul. 88

According to this writer's viewpoint, the panorama was thoroughly inoffensive fare; so much so, as a matter of fact, that it was mainly an entertainment for children. He remembered with nostalgic joy a youthful visit to a dioramic representation of Sir George Back's 1836 trip to the North Pole:

It seems to me now to be mostly ships in various positions, and very "spiky" icebergs. The daring navigators, Captain Beck [sic] and others,

87 "Moving (Dioramic) Experiences," op. cit., p. 304.
88 Ibid.
always appear in full uniform. They had all our sympathy. The most exciting scene was the capture of the whale, as it was called, although it scarcely amounted to a capture. When the finny monster had struck out with his tail and sent the boat and crew all into the air, a dreadful spectacle of terror and confusion, which caused a sensation among the audience, exhibited by rustling and motion in the dark, an unpleasantness, however, quickly removed by the humour of our lecturer, who, in his comic way, says, "As this is a process which happens on an average about once in the week, the sailors get quite accustomed to this ducking, and consider it rather fun than otherwise, as it saves them the trouble of taking a bath." This drollery convulses us, and the youthful minds think what it would give to have such wit. Not less delightful was the scene where the seals were playing together on the vast and snowy-white shore, with great "icebergs" (so our lecturer has a tendency to phrase it) in the distance, and the two ships all frozen up. We had music all through, as the canvas moved on. And when our lecturer dwelt on the maternal affection of the wounded seal which was struggling to save its offspring, and declined to escape into the water, Mr. George Harker, the admired tenor (but invisible behind the green baize), gave us, with great feeling and effect—was it the ballad of "Let me kiss him for his Mother?"

Some years later, after the middle of the century, the writer attended another North Pole panorama which detailed the perils and wanderings of "... the intrepid Navigators, M'Clintock and others." He noted that all of the effects were familiar and similar to those displayed in the earlier exhibition. Even the chief navigator looked like Captain Back.

89Ibid., p. 305. 90Ibid.
The above description may leave a present-day reader wondering how the nineteenth-century audiences could be so entertained by the panoramas with what Odell calls "... their immovable figures caught in a moment of crisis." But considering the nature of the audiences, it is understandable that their taste for spectacle would be satisfyingly indulged in such a manner. Undoubtedly it was the responsibility of the "witty" lecturer to spark life into the proceedings.

The essayist remembered another entertaining diorama from his youth:

Not less welcome in those old days was the ingenious representation of Mr. Green the intrepid aeronaut's voyage in his great balloon "Nassau." There was a dramatic air about all that. The view of gardens, crowded with spectators in very bright dresses (illuminated from behind), and with faces all expressive of delight and wonder, and the balloon in the middle—a practicable balloon not attached to the canvas. We could see it swaying as the men strove to hold it... At the sametime cheerful music behind the baize, "The Roast Beef of Old England," I think, struck up, and the garden, wondering spectators, trees, all went down rapidly, the balloon remaining stationary. The effect was most ingeniously produced. I shall never forget the interest with which that voyage was followed. We had the clouds, the stars, the darkened welkin, all moving slowly by (to music). The crossing of the channel by night, and the rising of the sun—wonderful effect! Plenty of rich fiery streaking well laid on. Then the continent, and terra firma again; and how ingeniously was a difficulty got rid

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91Odell, op. cit., V, p. 584.
of. Necessarily, the countries we were to see from Mr. Green's car could only be under faint bird's-eye conditions, and "so many thousand feet above the level of the sea" which could make everything rather indistinct and unsatisfactory. We, therefore, took advantage of the interval between the first and second parts to get rid of our large balloon which blocked up the center of the canvas, and changed it for a tiny one, which was put away high in the air, in its proper place, where it took up no room, and did quite as well as the other. However, at the close of the performance, when we had travelled over everything, and wished to see Mr. Green coming down, we took back our large balloon, and were very glad to see it again, and the wondering faces of the Germans. 92

This exhibition was obviously a dioramic-panorama with mechanical effects. The effect of the first scene, in which the balloon remained stationary while the background went down, was probably achieved with a slote or vertically moving frame which dropped through a thin opening in the floor. Unfortunately there is no indication in the text as to the staging facilities of the exhibition or even the exact date. Obviously, however, the panoramists were, in this case, making use of theatrical machinery in order to create spectacular and realistic effects.

The writer in All the Year Round went on to comment on the popularity of religious subjects in panoramas, a fact

which has already been evidenced on several occasions:

There is one scene which the dioramic world seems inclined not willingly to let die. At least it somehow thrusts itself without any regard to decent dioramic fitness upon every kind of diorama indiscriminately. Any student will know at once that I allude to the Church of the Holy Sepulchre at Jerusalem. This seems to have a sort of fascination for the painters. I never knew a single show that had not this church "lugged in" head and shoulders, or rather porch and pillars, either at the beginning or the end. I am afraid that this is from no spirit of piety or veneration, but simply from the favorable opening the church presents for changing from a day-light view to a gorgeous "night effect." They know, too, that the good are among the audience in strong forces, and that is touching the true chord. We know by heart the clumpy Byzantine pillars and the Moorish Arches, and the stairs down to the right, and the round globes of white light lamps burning, and the men in turbans kneeling.

Suddenly we hear the harmonium behind, and the voices of Mr. George Harker, the admired tenor, and Miss Edith Williams, the (also) admired soprano, attuning their admired voices together in a very slow hymn; and gradually the whole changes to midnight, with a crypt lit up with countless lamps and countless worshippers. A dazzling and dazzling spectacle . . . .93

Figure 13, showing a scene from John Banvard's Georama of the Holy Land, appears very much to be the representation just described. If so, it is support for the above writer's claim that he " . . . never knew a single show that had not this church 'lugged in' . . . ."

93 Ibid., p. 306.
The writer went on to comment on those two necessary supplements to the dioramic programs: the lecturer and the music:

... I recall the lecturer, a very solemn man, who preached a good deal as the canvas moved to music— it is a law that the canvas can only move to music.94

This last comment was in regard to a diorama which the writer had witnessed in a town in northern Ireland. But concerning lecturers which he had seen in less calvinistic surroundings, he wrote:

The lecturers are always delightful ... Is it a lucrative profession?— by the way it certainly must be a limited one. How he must get at last absolutely to loathe the thing he described, and yet he always looks at it as he speaks with an air of affection; but in his heart of hearts he must loathe it, or be dead to all human feelings or repugnances. For only consider the "day performance" at two— the night one at eight. Yet he always seems to deliver it with an air of novelty, and an air of wisdom, too, and morality, which is not of the pulpit or forum, but simply dioramic. It is only when he descends to jests and joking that he loses our respect.95

Spectators in this modern era of long, long run plays would not, perhaps, find the lecturer's illusion of the first time so startling. Figure 14 shows a moving panoramic exhibition in progress. It is similar to the kind described in these quotations. The panorama on exhibit was called the Ascent of Mont Blanc, and was shown at the Egyptian Hall,
Figure 14

Panorama of The Ascent of Mont Blanc,  
Egyptian Hall, London

Reproduced from OSUTC Film 1443*. Original in the Harvard Theatre Collection.
London. The decor of the hall is not typical of panoramic displays. For this one exhibition the facade in front of the panorama was built to resemble a Swiss chalet, in keeping with the subject of the painting. It is possible, of course, that this technique was often used to add novelty to the programs.

The writer in *All the Year Round* used a final remembrance to point up the startling effects incorporated into some dioramas:

Perhaps the pleasantest of the whole round was a certain diorama that called itself "The Grand Tour," and which carried out the little fiction of its visitors being "Excursionists," and taken over every leading city of the Continent. We were supposed to take our tickets, "first class," at London Bridge, embarked in a practicable steamer at St. Katherine's Wharf, with its rigging all neatly cut out, so that, as we began to move—or rather, as the many thousand square feet of canvas began to move—we saw the Tower of London, and various objects of interest along the river passing us by. The steamer was unbelievably good indeed, and actually gave delicate people present quite an uncomfortable feeling. Presently all the objects of interest had gone by, and we were out at sea, with fine effects by moonlight, fine effects by blood-red sunrise, and then we were landed, and saw every city that was worth visiting. Against one little effect some of our "excursionists"—among the more elderly—made indignant protest. When we were passing through Switzerland and came to Chamounix, where there had been a prodigal expenditure of white paint and a great saving in other colours, and found ourselves at the foot of the great mountain—I forget how many thousands of feet above the level of the sea, but we were told to a fraction—our lecturer warmed into enthusiasm, and burst out into the lines:

Mont Blanc, the monarch of mountains,
In his robe of snow, &c.
But the greatest danger that menaces us is, what our lecturer calls the "have-a-launch," which must be a very serious thing indeed. "Often 'ole villages may be reposing in peaceful tranquility, the in'-abitants fast locked in slumber, when suddenly, without a note of preparation"—Exactly, that is what such of us as have nerves object to—a startling crash produced behind the baize—a scream among the audience—and the smiling village before us is buried in a mass of snow—white paint. It is the "have-a-launch." This is the grand coup of the whole. Why does the music take the shape of the mournful Dead March in Saul?96

The practicable steamer in the exhibition was an interesting device. A side view of the ship's deck was probably constructed in front of the painting to give the audience the illusion of being on the deck, looking over the railing toward the painting as it passed by. At the close of the channel voyage, the ship with all of its rigging could be pulled off the stage, in the opposite direction of the panorama, giving the illusion that the passengers had disembarked and the ship had moved on. Then the landscape panorama could commence. It is likely that some of the Mississippi panoramas used a device of this same kind to intensify the illusion of a steamboat trip up or down the river.

The article in All the Year Round concluded with a nostalgic note on the fate of some dioramas:

Yet even dioramas have the element of decay. Sometimes they light on a dull and indifferent town,

96Ibid., p. 306.
and get involved in debt and difficulty. The excursions can't pay their own expenses. I once saw a panorama of the Susquehanna, covering many thousand square feet of canvas, and showing the whole progress of that noble river, sold actually for no more than five pounds. I was strongly tempted, as the biddings rested at that figure. It would be something to say you had bought a panorama once in your life.97

Other than the thoroughly delightful and illuminating insights which this article presents concerning the modes and manners of panoramic exhibitions, it is interesting to observe how the author quite unconsciously mixed his terms, panorama and diorama, almost as if they were interchangeable. A close examination of his text, however, will establish that he did not interchange them. It is only that many of the exhibitions he described were both panoramic and dioramic in character. Going quickly through a chronology of these exhibitions as this chapter has done, can easily lead one to assume that the terms, panorama and diorama, were used rather indiscriminately during the nineteenth century in reference to the same kind of programs. This does not appear to be true. An advertisement for a Moving Diorama meant just that: a long canvas painting, displayed between two revolting cylinders, which was specially painted to allow transparent effects. That there may have been stretches of opaque

97Ibid., p. 307.
painting intermixed with the dioramic effects did not confuse the primary purport of the exhibition. Conversely, a program called a Panorama might contain dioramic ingredients, but the main interest of the work was still to display a beautiful and realistic opaque painting. Nineteenth-century audiences were not confused by the terms. Even when an exhibition contained half-and-half, so to speak, the spectators knew which was the panoramic effect and which dioramic.

Continuing now with the chronology for the latter part of the nineteenth century, the panoramists' interest continued to be with historical and patriotic subjects. A panorama of Washington Crossing the Delaware and Columbus Discovering America were displayed in New York in 1869. In March, 1871, the Franco-Prussian War produced several panoramas which were highly popular with New York's German-American population. During September, 1871, there was displayed at a Baptist church in New York a "Chemical Panorama" of a Tour Around the World. Dioramic displays were evidently becoming more and more complicated.

During the beginning of the 1873 season, Odell mentions a few religious panoramas in the city, and then

98 Ibid., VIII, p. 547. 99 Ibid., IX, p. 68. 100 Ibid., IX, p. 239.
moves briskly on to more interesting entertainments, saying: "So much for the declining art of panorama."\textsuperscript{101} He neglected to reckon with the fast-growing Irish emigration, however.

The first diorama of Ireland appeared at the Apollo Hall in October, 1871.\textsuperscript{102} Another one, called Hibernia's Gems, consisting of both panoramic and dioramic effects, was shown at the Athenaeum in August, 1873,\textsuperscript{103} followed by a Panorama of Ireland at Tony Pastor's in January, 1874.\textsuperscript{104}

In Philadelphia in 1876, a Cyclorama of Paris by Night was exhibited in a building which is pictured in Figure 15 and was called the Colosseum. The building is typical of the ornate, Victorian character of panoramic exhibition buildings during this period. The patrons, having satisfied themselves with the illusionistic delights of the Paris Cyclorama within, could climb to the tower atop the building and enjoy a real-life cycloramic view of Philadelphia.

The exhibition was called a Cyclorama, a term which began to appear more and more frequently in relation to the large circular paintings. The term panorama, perhaps, was by this time more associated in the public mind with the moving paintings, and so the term cyclorama was coming to be

\textsuperscript{101}Ibid., IX, p. 336. \textsuperscript{102}Ibid., IX, p. 88 \textsuperscript{103}Ibid., IX, p. 502. \textsuperscript{104}Ibid., IX, p. 570.
Figure 15

Colosseum, Philadelphia (1876)

COLOSSEUM

CYCLORAMA

WROUGHT BY J. H. GIBBS
employed to define the full-circle representations. The word appears to have had no direct connection with the exhibition of the same name presented in London in 1848, a view of which is presented in Figure 11.

A Colosseum Handbook, which described the building in architectural detail, also notified the patrons that the painting contained, almost in equal parts, artistic delight and educational merit. The object of the cyclorama was "... to give both travelled and untravelled people a perfect representation of the most beautiful and fascinating city in the world." The painting covered 40,000 square feet of canvas and employed dioramic effects:

At certain intervals a novel scenic change is made, whereby the appearance of a storm is produced. By the aid of ingenious mechanism the whole landscape takes on an altered phase; clouds drive over the moon and stars; the myriads of lights in the streets and buildings are blurred or extinguished, and there are indications of sweeping rain and heavy gusts of wind. This transformation never fails to excite the liveliest surprise among spectators.

No information is given on the manner in which this was accomplished, but the usual dioramic transparencies were probably used, with the possible addition of projections from

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105 OSUTC Film 1468, Colosseum Handbook, p. 3.
106 Ibid., p. 9.
a magic-lantern. Magic-lantern or dissolving-view shows, as they were called, were popular as early as 1843. Images were projected against a screen by a powerful lantern. This technique may have been adapted to the panoramas during the 1870's. It was definitely a part of later panoramic exhibitions.

Returning to London, a most popular panoramic exhibition at about this same time was called Hamilton's Excursions: Across the Atlantic in Two Hours. It took its English passengers on a two-hour, whirlwind tour of the United States and portions of the Atlantic coastline. Two pictures from this panorama are pictured in Figures 16 and 17. Figure 16 shows a storm scene. The dioramic effects in this scene were the white-capped waves, the beacon light, and the dark storm clouds on the horizon. Figure 17 represents a steamboat race on the Mississippi. This is included to give some indication of how the famous Mississippi panoramas must have looked, and also to point out the dioramic effects of sunset, smoke, and glistening waters.


108OSUTC Film 1468, program. Original in the New York Public Library Theatre Collection.
Figure 16

Barnegat Lighthouse

Panorama: Across the Atlantic in Two Hours

Reproduced from OSUTC Film 1468. Original in The New York Public Library Theatre Collection.
A Steamboat Race on the Mississippi

Panorama: Across the Atlantic in Two Hours

Reproduced from OSUTC Film 1468. Original in The New York Public Library Theatre Collection.
The landscape scenery for this exhibition was painted by the famous theatrical scene painter, William Telbin. The representation concluded with a grand Pansteriorama of the landing of their Royal Highnesses, the Duke and Duchess of Edinburgh. This is a new name, probably coined for this exhibition, and about which there is no information.

In 1881, in New York, John Banvard's Original Panorama of the Mississippi River was exhibited at Republican Hall, and in February of 1882 there was an exhibition called a Panoramic Mirror of Ireland. The Mississippi continued to represent the spirit of the still available frontier, while Ireland harkened back nostalgically to the old country.

The Belgian Panorama Company, in September, 1882, exhibited a circular panorama of the Siege of Paris in 1871, painted by the French artist, Paul Philippoteaux. Odell states that "the panorama was a large painting of two thousand square miles," which is a startling figure. The program for the exhibition states that it was an "immense painting of more than 2000 square yards," which is less startling and

\[\text{References:}\]

110 Ibid., XI, p. 642.  
111 Ibid., XII, p. 143
112 Ibid.  
113 OSUTC Film 1468, program.
more to be believed. The same company exhibited a panorama of the Battle of Tetnan in October, 1884.114

One of the famous panoramas was displayed in New York in 1886. It was The Battle of Gettysburg, painted by Philippoteaux, and displayed at the Union Square Panorama building. The huge circular painting represented the whole field of battle surrounding some central point. It covered an immense sheet of canvas 400 feet long and 50 feet high, which was imported from Belgian, there being no canvas manufacturer in the United States who could supply it. The strips of canvas, from which the whole panorama was constructed, were nine yards wide and were sewn together with vertical seams.115

A most interesting device used in this panorama, for heightening verisimilitude, is illustrated in Figure 18. A three-dimensional effect was achieved by having cut-out figures placed in front of the painting and merged with it in such a way that the audience could not tell where one left off and the other began. Note also the shrubbery and grass on the platform. The platform concealed the bottom edge of the painting and the weights which pulled it taut.

114Odell, op. cit., XII, p. 544.
Figure 18

Panorama of The Battle of Gettysburg,
Litter Carriers

William Telbin has clarified the manner in which the mammoth circular panoramas were painted:

...the canvas is generally painted in the circular building destined for the exhibition, enabling the artist to view his picture in progress from the point of view at which the spectator will, when completed, view it. It is hung on an iron ring, and at the bottom of the canvas is fixed another ring, some two feet from the ground. To this bottom ring is attached a number of heavy stones or weights, and by this mode of stretching a perfect surface is obtained. That the artist may reach any portion of the picture a scaffold is constructed that moved on a circular line of rails...[Telbin] on one occasion, not assisted by this excellent arrangement, was obliged to paint in a sort of cradle hung from the principals of the building by a line in the keeping of two attendants—a somewhat dangerous position, as, constantly wanting to be hoisted up or down, the line was unable to be fixed; the fixity of their attention was also an unknown quantity in the early hours of the morning. Now and then, when not most carefully trimmed, he found himself dropped against the wet canvas and sticking to it almost as a fly.116

Telbin also noted that a circular panoramic exhibition had a solemnity about it which was a little embarrassing. No movement or sound attended the vast expanse of the picture, giving the whole display a death-like stillness. People who viewed such exhibitions tended to whisper in undertones.

For the remainder of the century there was a definite slacking off in panoramic exhibitions. Odell reports a

dioramic exhibition with actors in New York in 1889. But there is no information available about what this entailed. During 1891 the Battle of Gettysburg was still exhibiting at Union Square, and a panorama of Paradise Lost was advertised. In the Fall of 1893 two panoramas were displayed in New York: The Destruction of Babylon at Union Square, and a Panorama of Pompeii at the Gaiety Musee.

A panorama of special interest occurred in Paris in 1892. It was a circular panorama surrounding a replica of a ship which served as the spectators' platform. The ship-platform rocked with the spectators while they looked at the painting. Surrounding the bottom of the ship were moving ground rows simulating waves.

There were panoramic displays at the Paris Exhibition in 1900, and occasional panoramas continued to appear in New York and London. But by the first decade of the twentieth century the great Era of the Panorama was all but over. The Hamilton family, who had exhibited the panorama of Across the Atlantic in Two Hours in the 1880's, continued

117 Odell, op. cit., XIV, p. 405.
118 Ibid., XV, p. 767. 119 Ibid., XV, p. 745.
to present exhibitions until 1924, but by then only the most provincial communities were interested. The grand panorama buildings of the nineteenth century became twentieth-century riding academies and skating rinks.

There were attempts, around the turn of the century, to revitalize the panoramic exhibitions by using photographic projections against a circular panoramic wall, as illustrated in Figure 19. These were variously called Electrical Panorama, Cineorama, or Photorama. Devices were developed to project moving pictures on a 360 degree cyclorama, but these were more like moving slides than the moving pictures which are popular today. None of these attempts, however, were to catch public interest when the theatre was emphasizing a less spectacular form of realism and the cinema was beginning to attract attention. In the last analysis, it was the cinema which finally finished off the panorama.

\[122\] H. Southern, op. cit., pp. 67-68.
\[123\] Hopkins, op. cit., p. 358.
\[124\] Ibid.
\[126\] Hopkins, op. cit., p. 359.
Figure 19

The Photorama

III. APPLICATION TO THE THEATRE

It has been the purpose of this chapter to allow the chronology of the rise and decline of the panorama to tell its own story. No field of entertainment so widely scattered and diversified as that of the panorama can be chronicled completely in the short space permitted in this study, and no attempt has been made to do so. But the high points of interest, the main trends, and the over-all scope of the subject have been told in a highly selective manner. The objective was to give a better understanding of the conditions under which panoramic scenery became popular, by picturing the full breadth of the panoramic exhibitions, out of which the panoramic scenery grew. The results of this broad view can be applied in relation to the theatre under three categories: realism, special effects, and mechanics.

Realism. In the section devoted to scenery on the English stage, the Oxford Companion to the Theatre summarizes the theatrical situation at the close of the nineteenth century: "There was a cry for realism, in tune with the contemporary realism of painting and literature, and realism was in its turn the first essential to reform." 127

This reform, which theatre was striving toward at the end of the century, was an attempt to abolish staging practices which were all too often gaudy, unimaginative, and unconvincing.

The movement known by the name of "stage reform" has of late years received considerable attention in England and has awakened interest at least in the United States. It originated some twenty years ago in Austria with the primary object of encouraging the greatest possible imitation of nature in the mise-en-scene. The rudiments of art as understood by painters, sculptors, and architects were to be applied to the stage and true scenic art was to take the place of nondescript mounting of plays.128

This does not mean that the panorama, with all of its gaudy spectacularism, was one of the forerunners of stage reform. Many of the devices and effects which the stage borrowed from the panorama were the very things the stage reformists found most distasteful. The stage reform movement, as referred to in the above quotation, was largely a movement involving better mechanical equipment upon the stage, so that every possible means could be employed to produce believable theatrical illusions. There is no direct connection between this movement and the panorama, except that the mechanisms of some cycloramic horizons, which were highly

regarded by stage reformists, were influenced by the mechanical arrangements of the moving panorama.

But there still is a definite relationship between the panorama exhibitions and the trends toward stage reform at the close of the nineteenth century. The relationship is one of public conditioning rather than mechanical influence. In a word, the panoramas, with their remarkably successful attempts to produce complete illusion, produced an audience for realism in the theatre. By the close of the century the stringent interdictments against the theatre were disappearing from the middle-class populace. Theatregoing was a truly popular pastime, and yet many theatregoers must have been dissatisfied with scenic displays in the theatres after having seen what the panoramas could accomplish. Theatres did copy the panorama, of course, in their spectacular productions, but the panoramists' respect for complete verisimilitude influenced more than just the spectacles. Even the domestic-interior scenes in the theatre came into comparison with the highly realistic, dioramic exhibitions. A painted drawing-room back-drop would no longer satisfy an audience which had become accustomed to the Church of the Holy Sepulchre in Jerusalem in great realistic splendor.

As has been stated several times in the preceding chronology, the over-riding intent of all panoramic-dioramic
displays was to give the spectators a complete illusion of reality. If spectators, while looking at a panorama of a stormy ocean, began to feel heady and wobbly, the panoramic exhibitors congratulated themselves on the accomplishment of their purpose. The dioramic effects which they produced, whether they showed a steamboat afire on the Mississippi River or candles aglow in a Jerusalem temple, were spectacular only in the sense that they were almost incredibly true to life. Dioramic spectacle was not always the same thing as theatrical spectacle, in which highly imaginative colors and forms were used. The people who patronized the panoramas and dioramas were not interested in that kind of lavish display. It smacked too much of the theatre. What they were interested in, and what they received abundantly, were the most careful representations of nature which the painter's skill and the machinist's ingenuity could manage. Consequently, by the end of the nineteenth century, when theatre once again began to draw this class of people, their scenic tastes were on a photographic level.¹²⁹

There is no reason to limit the panorama's influence in this manner to the very end of the century. As has been

seen throughout this chapter, the panoramic exhibitors, painters, and machinists were frequently involved in theatrical activities also. This was particularly true of the scene painters, who often specialized in dioramic effects. Such men were not only responsible for the borrowing of effects and devices from the one form of entertainment to the other. Their panoramic activities and successes must certainly have influenced their concepts of theatrical scenery. It was realism and convincing illusion which they brought to the theatre from the panorama. Famous scenic artists, such as Stanfield, Roberts, T. Grieve, and W. Telbin were just as active in the panoramas as they were in the theatre. Actor-managers, such as Charles Kean and Samuel Phelps, who flourished around the middle of the century, have been lauded for the care with which they lavished realistic detail upon their productions. There may have been a great many factors which influenced them to undertake illusionistic productions, but one which has all too frequently been ignored is the panorama. By the middle of the nineteenth century, the panoramic and dioramic exhibitions were already immensely popular in London and were creating a large audience for illusionistic painting. Sensitive, enterprising theatre managers, such as Kean and Phelps, must have been influenced to meet the demands of this audience.
The stage reformists toward the end of the last century were greatly interested in theatre architecture. The ornateness of Victorian Theatre architecture was not conducive to the stage reforms they hoped to institute. The over-wrought detail and elaboration of the auditoriums distracted from the stage and made realistic illusion more difficult to achieve. In this regard, it is highly probable that the panoramic and dioramic exhibition halls brought some influence to bear upon the eventual simplification of auditorium design. The panoramists discovered that the more simple and colorless their exhibition halls were, the easier it became to draw the spectator toward the illusion of the painting. This is a discovery that theatre designers were to make also, and the influences of the late nineteenth-century dioramas may have been considerable in this new approach.

Effects. Special effects, accomplished as realistically as possible, were also much sought after in the theatres of the latter half of the nineteenth century. By special effects are meant not outrageous pantomime tricks, but carefully composed mechanical and scenic schemes which gave a startling illusion of reality. Horse races upon the stage, explosions, fires, natural visual effects, and countless other representations of a like nature fall into this
category. It should be remembered that, as far as panoramas were concerned, special effects of one kind or another always provided the pièce de résistance of the program.

The effects were the strong point of the entertainment. Any moment a flatish looking view might assume a fresh and romantic aspect with a change of lighting; a moon would shine forth, and with it a track of silver on sea or river, or lights sprung up in windows, or lightning flash across the darkened scene. And occasionally there would come a gap in the continuity of the flat canvas, revealing something in three dimensions on a higher category of scenic art.130

Panoramas, in this regard, influenced the theatre in two ways: (1) As with the matter of realism, the panoramic and dioramic exhibitions created an audience in the nineteenth century who were greatly charmed by special effects. This led the theatres to employ special effects in order to please the same audience. Of course, theatres had employed special effects long before the panorama was invented, and the panorama was not by any means responsible for the introduction of special effects into the theatre; but the panoramic-dioramic exhibitions did emphasize such effects and created an audience all the more desirous of seeing them. (2) Panoramas often used special effects which were already common in the theatre, but it is also true that the panoramas

pioneered and refined many effects which were later used on the stage. The reason for this is that the panoramas, and particularly the dioramas, having no need to bother with actors or with the vast number of properties and set pieces so necessary to the theatre, could concentrate on the effects. Especially the natural visual effects, such as moonlight, sunset, and sunrise were frequently used, perhaps overused, by the dioramas. A high degree of skill was achieved in these matters which was then available to the theatre.

As with the subject of realism and illusion, the influence of the panorama in devising and refining special effects has too often been overlooked.

**Mechanics.** The mechanical influence of the panorama, particularly the moving panorama, upon the theatre is less emphatic, largely because it was the theatre which first capitalized on the moving panoramic devices. The next chapter will present such information as is available concerning the mechanical operation of the moving panoramas and dioramas.

But there are two aspects of panoramic exhibitions which unquestionably had some direct effect upon the mechanistic practices of the theatre; these are lighting and painting. The importance of special effects in the panoramic-
dioramic exhibitions necessitated an exact and imaginative use of lighting. At first this was accomplished by the use of day-light which entered through apertures above and behind the paintings. But later, with the introduction of gas lighting, limelight, and electricity, the panoramists were able to refine their special lighting effects to a high degree. Many of these lighting refinements, about which there is little technical information, were the most memorable effects achieved in the panoramas. This fact is abundantly clear from the numerous references to the way illusion was achieved through lights behind the canvas. Undoubtedly many of these techniques were used by the theatres, having first been perfected by the panoramas.

It is equally probable that the panoramists, by the very nature of their work, developed many refinements in the art of large-canvas painting. This was true not only in the matter of skillful, realistic drawing, but also with regard to the use of gauzes, transparencies, cut-outs, tints, pigments, and the relation of day-light, gas light, and incandescent light to all of these elements. Again, these were matters to which the panoramists could give a great deal more thoughtful study than the theatricalists. The refinements which they accomplished through constant experimentation
were easily as applicable to theatrical scene painting and undoubtedly used toward that end.

Finally, the panoramic exhibitions found it necessary to offer the spectators realistic illusions of movement through mechanical means. Cut-out boats often were drawn past the moving panoramas of the Mississippi to give the effect of counter-movement. Trains and other vehicles were also used in the same manner. These devices aided the realistic effect of the progression of the canvas. Later in the nineteenth century, when the racing-melodramas became popular—such as *The County Fair*, *The Whip*, *Paris Port de Mer*, and *Ben-Hur*—these same counter-moving devices were used. The panoramas moved in one direction and the racers moved ahead of each other in the opposite direction. The mechanical contrivances for these effects, which will be discussed in Chapter V, were undoubtedly influenced by the panoramists' earlier attempts along the same lines.
CHAPTER V

THE ORIGINS, DEVELOPMENT, AND EMPLOYMENT
OF PANORAMIC SCENERY

I. INTRODUCTION

Theatrical staging during the nineteenth century underwent a development toward more and more spectacularism and realism. It was the mixture of these two elements which finally became the expression of theatrical tastes during the latter half of the century. The eighteenth-century interest in realism and illusion in painting and art, the antiquarian movement in scenic design during the early years of the nineteenth century, and the ever-growing public delight with melodramatic spectacle—all these were important factors leading toward a theatre in which realistic, illusionistic spectacularism was the intent and goal of most staging practices.

The previous chapter has already pointed out that the widespread interest in panoramic and dioramic exhibitions during this period was also an important factor in developing public tastes. The panoramic exhibitions attempted to produce complete realism in a spectacular manner. It would, perhaps, be going too far to suggest that the panoramic
exhibits during the nineteenth century became the arbitrators of theatrical tastes, and yet a strong case can be made for the assertion that the panorama was a vital factor in establishing those tastes. The reason the public attended the panoramic displays in such large numbers was because they were thrilled by illusions of reality, or, to put it another way, by realistic representations of nature. This is what they wanted and this is what the panoramas offered them. The panoramas did not have actors, plots, thought-provoking messages, human conflicts, ridicule, satire; or any of the other aesthetic or intellectual ingredients of drama. The nineteenth-century public gained their satisfaction along those lines through literature. That which they bothered to see had to be almost entirely visual in its appeal. If there was to be any intellectual stimulation at all, it was of the sentimental or moralistic variety.

The panoramic exhibitions provided an outlet for the public's illusionistic and visual wants. Dioramic effects added an element of spectacle to the realism of the paintings. The over-all impact was one of realistic spectacle as seen through a rosy, inoffensive filter of romanticism. And this, of course, is precisely what the theatre offered during the nineteenth century. The theatre offered it because the public demanded it, and the public's demand was in large part
shaped and directed by the kind of entertainment which the panoramas had been offering since the beginning of the century.

Not only did the theatres attempt to offer the same general type of entertainment as the public received at the panoramic exhibitions, but the theatres also adapted the panorama to their own needs, so that the panorama became one of the most successful ingredients of realistic, spectacular staging in the nineteenth century. In doing this the theatres were obviously capitalizing on a public taste which was already widespread.

It is the purpose of this chapter to examine the manner in which the panorama came into use in the theatre, to indicate the typical ways in which it was used, and to specify the mechanical and operational techniques with which it was employed.

In order to accomplish this purpose, it is necessary to organize the material in such a manner so that the theatrical, rather than the purely artistic elements of the panorama can be demonstrated. That is to say, the materials will be organized according to the ways in which the panorama was adapted to specific kinds of theatrical needs, rather than to impose a terminology of painting upon it and attempt to pigeon-hole it in that manner. The materials cannot be
divided according to landscape scenes and urban scenes, gay
scenes or moody scenes, scenes of simplicity or grandeur, or
any other arbitrary, artistic classifications. These divi-
sions might be employed if the panoramas were discussed
entirely apart from the theatre. But since it is the theatri-
cal panorama which this chapter purposes to discuss and
clarify, it is necessary to deal with the device according to
the kinds of plays or dramatic actions for which it was most
frequently employed. The Ohio State University Theatre Col-
lection has been most successful in organizing materials in
this manner. Theatrical elements are arranged in accord with
actual stage practices rather than with any historical,
artistic, or philosophical concepts which might be imposed
upon those practices from without.

Therefore, after first devoting a section to the
earliest origins and precedents of panoramic scenery, the
materials for this chapter will be organized into the follow-
ing categories: (1) pantomime panoramas, (2) scenic-transi-
tion panoramas, (3) ship-storm-sea scene panoramas, (4) racing
scene panoramas, (5) ascent-descent, or vertical panoramas.
These will be followed by a discussion of other materials on
the mechanical operation of panoramic scenery which are not

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1Cf. Jack W. Hunter (ed.), The Ohio State University
Theatre Collection Handbook (Columbus: The Ohio State Univer-
sity Theatre Collection, 1959.)
specifically related to any of the five categories listed above. All other conceptual and operational information will be brought out according to the manner in which the panorama was employed in plays containing scenes corresponding to these five categories.

II. ORIGINS AND EARLY DEVELOPMENTS OF PANORAMIC SCENERY

Chapter II has already reconstructed the foundation of artistic precedents and public tastes out of which the earliest panoramas grew, and Chapter III has discussed the first panoramic and dioramic inventions and developments. All that has been said in these two chapters is applicable to the origin of the theatrical panoramic scenery, for it was from the panoramic exhibitions that the theatrical panorama grew. It is now necessary to establish the manner in which the panorama and diorama came to be employed on the stage and the reasons for that employment.

At approximately the same time that Robert Barker was experimenting with his panoramic concepts atop the hill in Edinburgh, during the 1780's, Philippe Jacques De Loutherbourg was experimenting with theatrical illusions in his Eidophusikon. The devices which he used were not panoramic, in the same sense as the panoramic scenery which later came to be
employed upon the stage, but some of them did use mechanical appliances which pre-dated the theatrical panorama both in its operation and effects. Mr. W. H. Pyne, in his *Wine and Walnuts*, mentions their employment:

The clouds in every scene had a natural motion, and they were painted in semi-transparent colours, so that they not only received light in front, but, by a greater intensity of the argand lamps, were susceptible of being illuminated from behind. The linen on which they were painted was stretched on frames of twenty times the surface of the stage, which rose diagonally by a winding machine. De Louthembourg, who excelled in representing the phenomena of clouds, may be said to have designed a series of effects on the same frame; thus, the first gleam of morn led to the succeeding increase of light; and the motion being oblique, the clouds first appeared from beneath the horizon, rose to a meridian, and floated fast or slow, according to their supposed density, on the power of the wind.  

There is no indication that this cloud device was a moving panorama, composed of many feet of linen unwinding between two cylinders. What is clear, however, is that the effect was achieved by a continuous movement of the cloth, on which the clouds were painted and which moved across the stage in a somewhat diagonal manner. The reference to the "winding machine" also indicates that the effect was achieved in a manner similar to that later employed with the panoramas. Precisely what was meant by the linen being

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"Stretched on frames of twenty times the surface of the stage" is not clear, in that the "frames" would make oblique movement difficult, and a frame twenty times the surface of the stage would not fit on the stage. The most reasonable conjecture is that the "frames" were the two winding machines at either end of the linen. But the fact that the precise nature of the operation is unknown does not hinder the understanding that a continuously moving, painted cloth was employed to give the effect of increasing sunrise. De Loutherbourg's device is the first known reference to this particular kind of moving scenery. Also, his transparent effects, as noted in Chapter III, pre-date the patented invention of the diorama.

In 1779, several years previous to the display of the Eidophusikon, De Loutherbourg designed the scenery for a Harlequinade at Drury Lane, while that theatre was under the management of Richard Brinsley Sheridan. The piece was called The Wonders of Derbyshire, and was nothing more than an excuse for a display of some of De Loutherbourg's most beautiful scenery. The scenes displayed spectacular views of the Peak section of Derbyshire, an area famed for its

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craggy, wild landscapes. This was the kind of scenery, of course, which De Loutherbourg could paint with that highly romanticized, colorful flare for which he became famous.

The meager plot of The Wonders of Derbyshire contained the usual pursuit of Harlequin and Columbine by their adversaries. In explaining this particular scene, a descriptive pamphlet from the period stated:

... he [Harlequin] is soon detected, flies off with Columbine, and the pursuit commences through all the wonders of the Peak, of which a succession of beautiful, correct, and masterly views are presented.4

There is absolutely no indication that this succession of views was a panorama. It could have been nothing more than a series of back shutters which opened, one after another, revealing succeeding scenes behind. Still, the concept of a succession of scenes, loosely tied up with the plot action, was unquestionably the basis for the earliest known theatrical panoramas. De Loutherbourg anticipated this panoramic concept in effect if not in actual operation.

Thus it should be noted that De Loutherbourg established three important precedents to the panorama: (1) a "Winding machine" which drew a considerable length of painted scenery across the stage; (2) transparent effects which gave to

4Ibid., p. 57.
that scenery a dioramic quality; and (3) a concept of successive landscape scenes which were connected, however slightly, with the plot of the entertainment.

In 1796, two years after the opening of Barker's panorama building at Leicester Square, Sadler's Wells announced an evening of variety entertainments. The bill included a ventriloquist, dances, scenic spectacles, a tight-rope walker, and a Harlequinade. It also included an interesting exhibition entitled:

ENGLAND'S GLORY
or, THE WOODEN WALLS OF BRITAIN.

In the course of which will be given, as a progressive Scenic Picture, a View of the Most Brilliant Naval Actions, which have taken place since the Year 1793.5

The reference here to a "progressive Scenic Picture" strongly suggests a panorama. Unlike the term "succession," as was used in describing the scenes for De Loutherbourg's Harlequinade, the word "progressive" denotes a series of connected scenes bearing some physical relationship to one another. It can only be conjectured that this scenic spectacle was accomplished by unwinding a long painting across the stage. But it should be remembered that by this date

Robert Barker's long painting, in circular form, was already known in London, and it is conceivable that the management of Sadler's Wells attempted to capitalize on the panorama's popularity by unwinding a huge painting of the same kind between two cylinders. It would have been a perfectly natural way for a theatre to adapt a popular expository device to its own needs. Of course, the term panorama, presumably also well-known by that time, was not used, but this may only mean that Sadler's Wells management did not think to apply it, or hesitated to apply it for legal reasons. At any rate, the concept and the subject matter of the paintings are indicative of a panoramic device. If this Sadler's Wells entertainment was a moving panorama, it is the first known reference to its use as theatrical scenery.

The first definitive reference to moving panoramic scenery occurred in an article in the European Magazine for January, 1801. In describing a Christmas pantomime performed at Drury Lane on December 22, 1800, the article stated: "The distance then opens, and exhibits a moving panorama of the most magnificent buildings in London. A brilliant rainbow appears . . . ."6

6European Magazine XXXIX (January, 1801), p. 41.
The script for this pantomime, entitled Harlequin-Amulet; or The Magic of Mona, contains no reference to the use of a moving panorama, but then it does not contain scenic references of any kind. At the very end of the script, however, there are several lines which correspond in intent to the brief description of the panorama:

FINALE

Thus at length, the storm blown over,
Sunbeams bright and calm succeed;
Thus thro' dreary wilds each lover,
Finds at last the flow'ry mead.7

The panorama conceivably could have come just prior to this choral finale. The words of the chorus indicate the use of some scenic spectacle, ending in a "brilliant rainbow" or like effect. If so, the panorama had only the most flimsy connection with the plot of the pantomime. Like many ingredients of pantomimic entertainments, it was included for novelty and spectacle.

It does not appear that this was the very first use of a moving panorama, even though there is no definite evidence of a previous employment. If it had been a novel exhibition to that degree, the European Magazine article would surely have emphasized it more strongly. As it is, the

7Harlequin Amulet; or The Magic of Mona, OSUTC Film 457 (1800), p. 16. Original in Huntington Library.
article only notes that a moving panorama was used. This fact alone, however, may indicate some unusual status, for panoramas soon became so common in pantomimes that reviews seldom bothered to mention them at all.

This moving panorama was unquestionably the device which achieved widespread theatrical use throughout the century. The scenery passed across the stage in view of the audience. In this case, as noted in the European Magazine article, the backscene opened to reveal the panorama in motion. The rear stage position became the common placement of the panorama, mainly because it allowed the complicated machinery to be set up before-hand, without interfering with other scenic elements in the production. It is also interesting to observe that the subject of this moving panorama was quite like the subjects of the circular panoramic exhibitions. One of Robert Barker's earliest panoramas, in fact, in the year 1792, was a painting of the City of London. This pantomime panorama displayed a series of the most magnificent buildings in London, by what order of preference is not indicated. The important point is that the earliest known panoramic scene setting was nothing more than a duplication of the exhibition hall panoramas. It was put to no particular theatrical use, except, perhaps, a most vague transitional
employment. In any case it was used because of its spectacular qualities and not because it possessed any dramatic validity or merit.

From the beginning of the nineteenth century on, the moving panorama became a common scenic element in pantomimes, although references to its use during the first two decades of the century are rare. It was not until the invention of the diorama in 1823 that the theatres began to use the device in quantity. Dioramic effects added new spectacular and realistic interest to the panorama. As a theatrical device, the diorama was much more stage-worthy. Its transparencies and subtle changes of scene through the use of light made it a much more exciting and useful theatrical device than the panoramic paintings, which could only be beautiful and instructive.

The first indication of a diorama being used as a scenic setting was, as with the panorama, in a Christmas pantomime at Drury Lane in December, 1823. This was barely three months after the first dioramic paintings were exhibited by Daguerre in London's Regent's Park, indicating that the theatre was quick to see the theatrical validity of the new device. The pantomime, entitled Harlequin and the Flying Chest, contained a "Moving Diorama of the Plymouth Breakwater,"
and was executed by the famous scene painter, Clarkson Stanfield. In 1823 Stanfield was just beginning to demonstrate his considerable abilities in scenic art, but he went on to become one of the most famous scenic artists of the nineteenth century. It is permanently to his credit that he was the first theatrical artist to visualize the possibilities of the diorama and to adapt it for theatrical use.

Another diorama was presented at Drury Lane on April 19, 1824, in connection with one of William T. Moncrieff's slight pieces, called Zoraster; or Spirit of the Star, "a grand melo-dramatic Tale of Enchantment, in Two Acts." Undoubtedly the whole entertainment was built around the diorama, which occurred toward the end of the performance: "The back part of the scene disappears and discovers the EIDOPHUSIKON."10

The use of the term "Eidophusikon" was an undoubted reference to De Loutherbourg's earlier exhibition. A full description of the dioramic painting is included in the printed script of the pantomime, and a partial reproduction

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8Literary Gazette, VIII, No. 363 (January 3, 1824), p. 12.
10Ibid., p. 23.
of it will give a clearer idea of the content and entertainment value of the earliest dioramic scenes. The moving diorama commenced with:

THE GREAT DESERT BY TWILIGHT
And Arab Encampment:

Arabs discovered reposing in the tents, others reclining o'er their Watch Fire, or contemplating the coming morning; the Scene progresses and

A CARAVAN OF MERCHANTS

Appears at a distance crossing the desert near the Pyramids

Merchants, Camels, Slaves, Equipage, &c. increase in size, and advance to the front; it is now broad day. Merchants depart.

THE PYRAMIDS
And the Colossal Head of the SPHYNX,

those wonders of ancient days, now appear; groups of Figures surround the Head of the Sphynx, admiring its stupendous grandeur, and employed in taking its altitude; they give place to the magnificent ruins of

THE GREAT TEMPLE OF
APOLLINOPOLIS MAGNA

In the extensive halls of this temple are devotees kneeling in prayer, and travellers admiring the grandeur of its decay.

The Temple gives place to the Gigantic

COLOSSUS OF RHODES,

With all its animated scenery, which leads to a view of the beautiful
BAY OF NAPLES

Taken near Castle del 'Oro and exhibiting Fort St. Elmo; Soldier's Garrison on Pizzofalcone, Light-house and Mole, terminating with a glowing glimpse of the Appenines by sun-set. The Lazaroni, Cavaliere, Pescatori, with their fishing-boats, Gondolas, &c. are vividly represented, showing all the motley personae usually frequenting the celebration of the carnival.\(^{11}\)

The display went on much longer than indicated here, but the quality of subject matter continued in the same vein. A number of observations can be made from this description which are generally applicable to most of the early dioramas:

1. The diorama was revealed in movement by the sudden disappearance of the backscene. This was accomplished either through the parting of back shutters, or by having the backscene drop through a slot.
2. The diorama employed a stop-and-go technique. It did not move continually. As each spectacular picture appeared, the canvas halted while the audience drank in the full splendor of the scene.
3. Dioramic changes from evening to morning, or from dawn to bright day, were popular effects.
4. Scenic emphasis was on the "grandeur of decay."
5. "Animated scenery" allowed a variety of twinkling, shining, clouding dioramic effects.
6. There was no necessary continuity to the scenery

\(^{11}\)Ibid., pp. 23-24.
represented. It could move from the Colossus of Rhodes to the Bay of Naples with no sense of incongruity. Unlike the circular panoramas, the moving panoramas or dioramas were often a series of unconnected scenes painted on the same length of canvas. (7) The diorama was not integral with the plot of the entertainment. It was included for sheer spectacular effect.

Both panoramic and dioramic stage settings began to be used shortly after their non-theatrical counterparts had been invented and exhibited. Barker's first panorama was displayed in London in 1794, and by 1800 moving panoramas were no longer a novelty in the theatres. Daguerre exhibited his first diorama in London in the Fall of 1823, and by Christmastime of that year a moving diorama was employed in a pantomime. The process of adaptation occurred more quickly with the diorama than with the panorama because by the 1820's the concept of moving, two-dimensional scenery was already established.

Before proceeding to a discussion of the various kinds of theatrical scenes in which the moving panorama was most commonly used, a number of general statements should be made concerning the theatrical adaptations of this device: (1) Theatre managers began using the moving panorama, not because it was a great step forward in scenic or staging
practices, but because the non-theatrical panorama had caught the public's fancy. The panorama came into the theatre because of its theatrical demand, not theatrical necessity. Of course, once it was adapted to the theatre it was often used imaginatively and splendidly. (2) The earliest panoramic scenes did not differ from the non-theatrical panoramic exhibitions in either subject matter or purpose. Both concentrated on landscapes, historical monuments, ruins, views of famous cities, and military and naval battles. Both sought to entertain and delight by presenting these pictorial subjects in a spectacular and realistic manner. (3) Panoramic scene settings were first used in those entertainments which were primarily scenic displays from the start, such as pantomimes and variety entertainments. The panorama became a particular scenic favorite of the pantomime, especially as the century wore on and the pantomimes were more and more concerned with sheer spectacle. The earliest adaptations made little attempt to integrate the panorama with a dramatic plot, or use it as background scenery for dramatic action. This was a sensible move, since the panorama could never be used for a scene in which the plot or characterizations were more important than the spectacle. (4) Following the invention of the diorama, most moving panoramas contained dioramic effects. The proper term for the device in almost all of
its uses is moving panorama, but it should be understood that
dioramic effects were almost always a part of the spectacle.
A moving panorama was a moving or progressive painting,
usually with dioramic features. It was, of course, the dio­
ramic effects which were of real theatrical interest. It can
be said that the term **panorama** referred to the theatrical
device, while **diorama** referred to the theatrical effect. It
was with this understanding that the two terms were employed
throughout the nineteenth century.

**III. PANTOMIME PANORAMAS**

It has already been observed that panoramic scenes
were first employed in pantomimes. At the beginning of the
nineteenth century the English pantomimes still maintained
some semblance of dramatic order. They had not yet developed
into that particular brand of theatrical chaos for which
they became infamous later in the century.¹² Still, they
afforded ample room for the introduction or insertion of
spectacular ingredients, particularly those kind which
afforded movement, color, and novelty.

¹²James Robinson Planche, *The Recollections and
Reflections of J. R. Planche* (London: Tinsley Brothers,
1872), II, p. 139.
The panorama became such a staple of pantomimic entertainments that it is quite impossible to refer to all of them, even all of the most spectacular ones in this study. It will be of value, however, to examine the employment and effect of a representative number of pantomime panoramas in order to understand their typical use, and also to observe such influence as they may have had on the use of panoramas in other theatrical endeavors.

Prior to the invention of the diorama in 1823, panoramas were used relatively infrequently in pantomimes. At least reference to their use during the first two decades of the century are few and uninteresting. It is understandable that the moving panorama, devoid of dioramic effects, was essentially unexciting and untheatrical. What made panoramas so popular in the circular exhibition halls was the great attention given to realistic illusion. The spectators, it will be recalled, were not permitted to see the top or bottom of the painting, and from their central viewing-platform they were overwhelmed and engulfed by the huge painting surrounding them. It was not the painting alone which interested them, but the entire illusionistic effect.

In the theatres, however, this sense of complete illusion was almost impossible to recreate. There was the other scenery on the stage, the illuminated and elaborately
decorated auditorium, and, especially in the pantomimes, an over-all sense of the theatrical rather than the real. Consequently, the earliest theatrical panoramas consisted only of large and beautiful paintings progressing across the stage. Once the novelty of this effect was gone, the moving panorama must have seemed peculiarly lifeless and two-dimensional.

With the addition of dioramic effects, however, the moving panorama acquired a distinctly theatrical quality. That is to say, something happened to the paintings as they were being displayed, and surely one of the most important requirements of any theatrical entertainment is that something must happen, and happen in an interesting manner. Thus it was during the third decade of the century that panoramas, with dioramic effects, began to be employed more frequently, and began to be experimented with to determine their possible theatrical uses. Much of this experimentation with panoramas occurred in the pantomimes.

During the 1824 Christmas pantomime at Covent Garden, a moving panorama, painted by the Messrs. Grieve, was employed with a novel effect. The thirteenth scene was a sailboat race, in which four sailboats were to compete for a prize. The scene was represented by a moving panorama, which showed bridges and buildings along the bank of the Thames passing by. In consecutive order, the audience saw Blackfriars
Bridge, Temple Gardens, Somerset House, Waterloo Bridge, a Grand Equestrian Stature of King George IV, Westminster Bridge, and numerous other points of interest, terminating with the finish of the sailboat race at Cumberland Gardens.\(^{13}\) As the panorama passed along at the back of the scene, the four sailboats remained stationary in front of it. While the scenic description in the printed script of the pantomime offers no information as to how this effect was handled, it seems reasonable that the contestants in the boats would have simulated the actions of sailing. At the end of the race Harlequin's boat was pulled slightly ahead of the other three and he was proclaimed the victor as the panorama ceased to move. Ground rows representing waves must have been placed in front of the boats.

This is the first known reference to the moving panorama being used in connection with a dramatic action. The effect was probably quite novel, and achieved that combination of pictorial realism and dramatic excitement for which the moving panorama was to become increasingly famous.

A Drury Lane playbill for February 7, 1826 advertised a pantomime entitled, \textit{Harlequin, Jack of All Trades}, which

\(^{13}\)\textit{Harlequin and the Dragon of Wantly}, Covent Garden (1824), OSUTO Film 275, p. 12.
included a somewhat similar effect, although in this case the effect was achieved by the panorama alone. The panorama, called *Naumetabolia*, was painted by Clarkson Stanfield and comprised the adventure of a ship of war: "Launch at Dover--Equipt for sea, and lying-to off the North Foreland--In a gale of wind--Ship-wrecked--Life Boats go out to her Assistance--Towed into a Foreign Port." All of this was painted on the canvas, undoubtedly with dioramic effects, and amounted to a kind of plot-panorama, in which the paintings and effects told their own story. The panorama may or may not have had a connection with the pantomime, but it achieved a certain dramatic excitement in its own right. Employment of a panorama in this manner was an attempt to bring dramatic validity to a non-dramatic art form.

A panorama called *Porsibasilartikasparbosporas* was painted by Mr. Roberts for *Harlequin and Little Red Riding Hood* at Covent Garden on December 26, 1828. It included landscape and battle views from St. Petersburg to Constantinople. Figure 20 is a reproduction of the panorama. The painting begins at the top left and ends at the bottom right.

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Figure 20

Panorama: Porsibilartikasparbosporas,
Covent Garden (1828)

It can be seen that the painting has little continuity. It is actually a series of separate scenes, each one detailing the march of a military caravan and emphasizing certain exciting episodes along its route. It could just as easily have been painted on eleven separate pieces of canvas. The technique in this case was to move the canvas from view to view, stopping each time to allow the audience to examine each painting. The episodes pictured on the panorama had no connection with the plot of the pantomime. It was a purely spectacular device, and, except for the lack of continuity between the scenes, it was much like the exhibition hall panoramas. The long title of the panorama was a frequently used publicity device, whereby, in a rather cryptic manner, the whole geographical breadth of the painting was encompassed in one word.

A year later, on December 26, 1829, Drury Lane offered a "Grand Local Diorama" by Stanfield, for its pantomime *Jack in the Box; or Harlequin and the Princess of the Hidden Island*. The painting included a series of typical panoramic views of Windsor and its vicinity, and was embellished with a number of dioramic effects such as moonlight and waterfalls.

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16 *Jack in the Box, Drury Lane (1829), OSUTC Film 493, p. 1.*
Two items of special interest should be noted, however. The panorama occupied the last scene of the pantomime, just before the finale. This may have been done to facilitate scene-shifting during the earlier part of the entertainment, but it also seems likely that the moving panorama was reserved for the final scene because it was the high point of the spectacle. In most pantomimes the panorama was placed at the end or well toward the end of the program, as though it was what the audience was waiting to see. Another interesting point is that this panorama of domestic scenery was called a Grand Local Diorama. The St. Petersburg to Constantinople panorama described and illustrated above was referred to only as "Grand." Other panoramas made this terminological distinction between domestic and foreign subject matter. Evidently the convention was established that "Local" or "Grand Local" were used for panoramas of domestic views, while "Grand" was applied to panoramas of foreign views. These phrases were not always used, but when they were, they were employed in this way. It is conjectured that the use of the word "Grand" in this manner derived from the British concept of the Grand Tour of Europe.

The pantomime, Harlequin and Cock Robin, at Covent Garden on December 28, 1829, contained a diorama of a North
Pole expedition. It was painted by Mr. Roberts and presented a pictorial record of that expedition's search for a North-west passage from the north Atlantic to the north Pacific. The paintings were in no way unusual, but a rather novel and interesting device was used at the beginning of the dioramic journey. The scene prior to the diorama represented a foyer leading to a dioramic exhibition hall. An announcement read: "Walk in and See Mr. Robert's New Moving Diorama of The Polar Expedition." This scene was then withdrawn and the audience, accepting the fiction that they had entered the hall, saw the diorama passing before them. The introduction of a theatrical panorama by this method is evidence of the manner in which the theatres capitalized upon the popularity of the panoramic and dioramic exhibitions.

Of terminological interest is a panorama which was used in the 1831 Covent Garden Christmas pantomime, Hop o' My Thumb. It was painted by Thomas Grieve and was called "The Grand Local Cosmorama." It will be recalled, from Chapter IV, that the cosmorama was originally a peep-show.

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17 Harlequin and Cock Robin, Covent Garden (1829), OSUTC Film 492, p. 1. Original in Huntington Library.

18 Ibid., Scene XVII, n.p.

19 Hop o' My Thumb, Covent Garden (1831), OSUTC Film 87, p. 1.

entertainment, wherein small paintings within a box-like arrangement were magnified by the use of lenses. In this pantomime, however, the term was applied to a moving panorama which represented the progress of the Royal Family sailing along the Thames in the Royal Shallop. There is no indication that any kind of special device was used or special effects achieved that were not already known in the usual panoramas. Here again, it seems, the theatre was capitalizing upon the popularity of a non-theatrical name in order to draw the public. The term Cosmorama would give the impression of a spectacle of considerable dimensions. Unfortunately, there is no extant information on the size of the device. Apparently it was a regular panorama with a big name.

Mr. Stanfield, who was, perhaps, the most busy of theatrical panoramists during the 1820's and 1830's, painted a "Grand Diorama of Venice" for the Drury Lane Christmas pantomime in 1831, Harlequin and Little Thumb. The pantomime script's lithographic key to the diorama is reproduced in Figure 21. It is interesting that the lithograph was presented in circular form, as though that was the form in which most readers would be accustomed to viewing a panorama.

21Harlequin and Little Thumb, Drury Lane (1831), p. 1
OSUTC Film 270. Original in Huntington Library.
Figure 21

Mr. Stanfield's Diorama of Venice, Drury Lane (1831)

Reproduced from OSUTC Film 270, Harlequin and Little Thumb, opp. p. 1. Original in Huntington Library.
When the panorama had progressed just past The Lido, represented as No. 4 in Figure 21, a chorus of gondoliers entered and sang:

List to the Boatman's roundelay,  
Telling of Battle's bright array;  
Breathing to those by night who rove,  
Tales of the gentler theme of love

Now while we row with glee  
Over the silent sea,  
List to the sounds melting away,  
Like the last beams of dying day.  

It should be noted that at this point in the panorama, according to the lithograph, there was not much scenery—only a low, dim line of buildings and water. Perhaps the members of the gondoliers chorus refused to compete with the spectacle. At any rate the effect was undoubtedly achieved by placing ground rows of waves and a number of mock gondolas in front of the panorama. The landscape panoramas in pantomimes were being used more and more in conjunction with other scenic elements and with actors. This was probably the most complete development that could be expected in the pantomimic panoramas.

A "Grand Moving Panorama, Representing a Trip to Antwerp, in the Steam Frigate 'Rhadamanthus,'" was painted

\[\text{Ibid., p. 15.}\]
by the Messrs. Grieve for a Covent Garden pantomime in 1832. Figure 22 is a reproduction of the panorama. The panoramic voyage begins in the upper right hand corner and ends in the lower left. The only vessel pictured in the painting which appears to be a steam frigate is No. 18 in the upper left corner. Evidently, then, the steam frigate Rhadamanthus was not the subject of the painting, but rather a set-piece representation of the frigate which was placed in front of the panorama, and the audience was supposed to imagine itself her passengers. This common panoramic technique sought to heighten the excitement of the illusion. It can be seen in Figure 22 that the painting was, typically, lacking in continuity. The panorama paused at each point of interest.

The remaining pantomimic references are from Sadler's Wells theatre during the management of Samuel Phelps, from 1843 to 1862. Practically every pantomime presented at Sadler's Wells during that period contained a moving panorama or some kind of dioramic scenery. Most of them did not differ from the examples at Drury Lane and Covent Garden which have already been presented, except that the subject matter appears on occasion to have been more whimsical.

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Figure 22

Panorama: A Trip to Antwerp, Covent Garden, (1832)

GRAND MOVING PANORAMA.
Painted by the MESSRS GRIEVE in the Pantomime of
PUSS IN BOOTS.
There were, for example, "Mother Bunch's Dioramic Illustrations of Fairyland," in 1846; a "Dioramic Entrance to the Goblin's Golden Land," in 1848; and a "Dioramic Journey Through Fableland," in 1855. The panorama subjects went along with the changing patterns in pantomimes, and the pantomimes of the mid-Victorian era increasingly assumed a nursery-rhyme orientation.

Of greater staging interest was a Sadler's Wells Christmas pantomime in 1846, entitled Harlequin and a Happy New Year. At one point, the following dialogue and scene directions appear in the script of the pantomime:

CHORUS

Now attend us Goddess Mirth
Give to harmless laughter girth
Light the heart of Sons of Earth
And let Folly Reign.

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24 Harlequin and a Happy New Year, Sadler's Wells (1846), OSUTC Film 1462B*, Playbills.
26 Harlequin and Puss in Boots, Sadler's Wells (1855), OSUTC Film 1462C*, Playbills.
28 Harlequin and a Happy New Year, Sadler's Wells (1846), OSUTC Film 1462A*.
At End of Chorus omnes Exeunt & sc. changes.

Diorama [in prompter's hand]

The White Cat's Forest in Fairy Land with Lake at back by Moonlight.

This scene change could have been accomplished thus: as the chorus exited, the back scene could have been removed to reveal a single dioramic painting of the White Cat's Forest with moonlight effects. This would have been a non-panoramic use of dioramic painting. However, it is also possible that the scene behind the chorus while they sang was already painted on a moving dioramic canvas. As they left the stage, the canvas could have moved on in the usual panoramic manner, revealing the moonlight forest scene. There are no indications in the script, either before or after this single reference, of a diorama being used, so which of the two possible methods described above was actually used is pure conjecture. It is true, however, that the single word "diorama" or "panorama" in a prompt note usually referred to the familiar moving form. If this diorama was used in the second manner described above, it was an unusual employment of the device to facilitate scene changes throughout the pantomime.

A more familiar but nonetheless interesting use of a moving diorama occurred in the 1858 Sadler's Wells pantomime

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29Ibid., p. 6.
entitled, Old Izaak Walton. The boy-hero of the piece, Tom, and the foolish man, Izaak, go off to see a young maiden whom Izaak hopes to marry. As they begin their journey, the following scenic description appears in the script:

**Diorama Commences**

During which the two appear to get very warm, taking off their coats and throwing them over their arms, &c.—Pause at Hedge Ale-House, "whilst a smoking shower passes away."—Landlord comes out, supplies ale, they are refreshed, and journey onward till they reach the banks of the river, when they go off with scene.

In this unusual diorama the actors pretended to move along with the painting as though they were walking past the landscape. This effect may have been accomplished by placing Tom and Izaak on a treadmill, or they may have simply simulated the action of walking. The Hedge Ale-House appeared, painted on the dioramic cloth, and the landlord emerged to bring refreshments. This can only mean that the diorama contained a cut-out for the ale-house door, making the dioramic scenery not only spectacular but also practicable. There are few references to this use of the moving diorama, probably because it was difficult to have practicable cut-outs in the cloth without causing difficulty with its tautness.

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30Old Izaak Walton, Sadler's Wells (1858), OSUTC Film 1462B.

31Ibid., p. 9.
Finally, the Sadler's Wells Christmas pantomime for 1860, called *Harlequin Sinbad the Sailor*, used a ship, evidently placed in front of the panorama. The dialogue and scenic directions, for a scene in which Sinbad was arranging a fable-like sea voyage, state:

Sind: Your foolish pride that individual shows up,  
At whom you turned your honorable nose up;  
But I forgive you—ere our trip commences.  
Here is the sum to pay the whole expenses;  
Now for our voyage, put each case on deck.  
From this old spot I start with a new spec.

**BALLET DANCE**

(Exit Sinbad, Ali, Sailors, &c. into ship)

**PANORAMA ENDING AT**

**GOLDEN GATES OF THE PALACE OF KING MIHRAGE**

(Enter King Mihrage, Gold Stick, Vizier, Guards, &c.)

In this case the ship, with Sinbad and his friends supposedly inside, must have been pulled off-stage at the end of the panorama, just as the painting terminated at the King's Palace. It is an example of the manner in which moving panoramas were employed to effect a scenic transition, and, at the same time, to provide a spectacular stretch of painting.

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32 *Harlequin Sinbad the Sailor*, Sadler's Wells (1860), OSUTC Film 1426B#.

33 Ibid., p. 8.
This survey of selected pantomime panoramas indicates that the pantomimes employed moving panoramas and dioramas in five principle ways: (1) The panorama was introduced into the entertainment as a purely spectacular device. It had no essential connection with the plot of the pantomime and was often inserted toward the end of the program as the main spectacular event. In these cases the moving panorama was little more than a theatrical adaptation of the exhibition hall panoramas. (2) Pantomimes sometimes organized the moving painting into a kind of pictorial story, in which the successive scenes contained plot elements of their own. A common example of this type of panorama was one in which a ship was pictured leaving its port, then meeting a dangerous storm, and finally reaching safety. (3) Pantomimes occasionally used a scenic unit in the form of a ship, which was placed in front of the moving panorama. The audience was supposed to imagine itself aboard the ship, watching the river bank or coastline pass by. There were numerous variations on this technique, all of which purposed to give the audience a greater sense of illusion. (4) The most complex and dramatically integrated use of a moving panorama in a pantomime occurred when actors in boats or actors moving on land were placed in front of the painting. This technique was supposed to create the illusion that the actors, not the
painting, were in movement. (5) The most consistent theatrical use made of panoramas in pantomimes was for scenic transitions through time and space. Journeys over vast areas could be simulated with a moving panorama, and dioramic effects could produce illusions of change, from morning to night, from fair weather to stormy weather, or from one season to another.

IV. SCENIC TRANSITION PANORAMAS

Moving panoramas were first employed in the theatre for picturesque and spectacular purposes. They were in no way connected with the plot or dramatic development of the entertainment and were included only because the public had already fashioned a taste for such displays in the exhibition halls. The motivation for the panorama's introduction in the theatre evolved from box office aspirations more than from dramatic necessities.

However, once it became obvious that the moving panoramas were becoming popular with the theatregoing public, new ways in which to use the devices began to be sought. The possibilities were not unlimited. A moving panorama almost always usurped the stage picture. Actors could hardly be expected to play important dramatic scenes in front of it, and other, stationary pieces of scenery looked ludicrous
before a moving background. Besides, saving pantomimes and sheer spectacles, there were few plays in which the moving panorama could be appropriately employed. The device was popular, but theatre managers had to fashion ways to make its use seem sensible.

It was soon discovered, of course, that the moving panorama had at least one legitimate, theatrical use. It could be used for scenic transition, and used in such a manner that the transitions would not only appear convincing but also entertaining and picturesque. It was probably in the pantomimes that the moving panorama first came to be used in this way. A scene for one location could flow, as it were, into a scene in another location by allowing the panorama to unwind and display interesting views between the two scenes. This was not a theatrical necessity, perhaps, but it did provide a logical employment for the moving panorama. The effect could be made even more believable if a boat, for example, were placed in front of the moving canvas, allowing an illusion of the boat moving along the bank of a river. Illusions of reality were just as important in panoramic scenery as in the panoramic exhibitions. In the theatre the audience could not be overwhelmed by the illusion to the same degree as they could be in the panoramic or dioramic exhibition halls, but they could be given a sense of movement, as
though they, not the scenery, were progressing from one place to another. The first truly theatrical use, then, to which the moving panorama was adapted, was the scenic transition.

Still, there were not many plays which called for this method of transition. In order to make a panoramic transition credible, the play had to require a change from one picturesque locale to another, and preferably a change which required that the actors, and the audience, go along for the ride. Panoramic transitions were, by their nature, leisurely transitions. There was no point in using them for abrupt or fast-paced changes of scene. The panoramic emphasis, after all, was still on spectacle. The device could be used only where a scenic transition of pictorial interest seemed plausible.

In answer to this problem numerous playwrights went to work, beginning in the 1820's and 1830's, to write plays especially suited for the moving panorama. Odell refers to a number of these plays which appeared in New York during these years. There was W. T. Moncrieff's *Paris and London*, or *A Trip to Both Cities*, in 1828, which centered around a moving dioramic journey across the English Channel from Calais to Dover.\(^3\) During that same year there appeared

\(^3\)Odell, *op. cit.*, III, p. 320.
William Dunlap's *A Trip to Niagara*, which featured a boat trip from a wharf in New York, up the Hudson River, and along the Erie Canal to Niagara. The audience was supposed to be among the boat's passengers. The Bowery Theatre, in 1831, performed *The Water Witch*, which centered about a moving diorama. The diorama took the audience through the Narrows, past Ellis Island, and up the East River to Hellgate and included storms and waterspouts. An afterpiece, called *Son of the Sea*, at the Franklin Theatre in 1837, consisted almost entirely of a moving dioramic trip on the river Thames. The play in this case was merely an excuse for showing one long panoramic transition. Thomas Pitt's *Rookwood; or Dick Turpin the Highwayman* was staged in New York in 1838 with a moving diorama to make Turpin's ride to York more realistic. In all these cases, the play was merely a vehicle for the panorama, and in each case the panorama was used for a transitional scene. Of course, in these plays the most memorable action involved the spectacle of the moving panorama.

It was not until 1839, in London, that there is evidence of a transitional panorama being used in a full-length play of unquestioned merit. This was in William Macready's

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production of Henry V at Covent Garden in June, 1839. Concerning the use of the panorama in this production, the London Times reported:

As a scenic spectacle the play of Henry V, as produced last night, merits unqualified praise, and we scarcely know whether most to admire the care, taste, and research displayed in the design or the beauty of the execution. The most novel and ingenious idea is the accompanying of the Chorus . . . by a succession of painted illustrations by Stanfield. At first the curtain is removed, and discovers another curtain appropriate to the piece, adorned with the arms of England and France, and with a border formed of the escutcheons of the principal characters of the piece. When this is withdrawn, Time is discovered upon a circular orifice occupied by clouds, which dissolve away, and present an allegorical scene representing "the warlike Harry" with "famine, sword, and fire at his heels leashed like hounds." This scene vanishing, the play begins.39

The allegorical scene was represented by a moving diorama, which, after use, was drawn off to reveal the first setting of the play. This device was used at the beginning of every act to accompany the transitional speeches of the Chorus. The clouds were apparently used to mask the edges of the diorama and to give a dream-like effect to the transitions. The clouds were also arranged to open and reveal the diorama at the start of each act. Notes from the prompt

39Merchant, op. cit., p. 98.
book of the production state, at the beginning of Act II:
"begin to open clouds. Diorama moves."40 Another review of the production reported:

... the third [act is introduced] by a moving diorama (the most splendid piece of machinery we ever saw in a theatre), depicting the voyage of the English fleet to Harfleur, views between which town and that of the place of embarkation (Southampton) form the different subjects. On the ship's arrival at Harfleur, the siege is commenced, and while it is thus being represented, the curtain is raised, and the action of the opening scene describes the same thing. If, out of the many excellencies which were so obvious, any particular one can be extracted for more commendation... it is surely this portion of the piece. The melting away of the pictorial into the real siege was truly wonderful; and the transition was managed with such consummate skill, that it was utterly impossible for anyone to detect the precise moment at which either the one ended, or the other commenced.41

The prompt notes for this transition read:

Curtain up, and then opens and moves on.
Music,—as the drop rises.—It [the music] continues, as the scene opens, presenting the embarkation of the King, and the sailing of the Fleet; it [music] gradually dies away, as night appears to come on, and the single ship is left on the scene. The Chorus then speaks.42

40 Henry V, Act III, Sc. 1, OSUTC Film P. 1600, p. 343.
41 George D. D. Odell, Shakespeare from Betterton to Irving (New York: Charles Scribner's Sons, 1920), II, p. 221, citing Oddfellow (June 15, 1839).
42 OSUTC Film P. 1600, op. cit., opp. p. 366.
The Chorus, at this point, spoke the beginning lines of the Act III prologue: "Thus with imagined wing our swift scene flies . . . ." The diorama did not move, allowing the harbor scene with a night effect to remain before the audience, until the Chorus came to the line: "Work, work your thoughts, and therein see a siege," at which point:

Music resumed, as the scene advances: when the French coast begins to appear, very distant shouts, and alarums are heard, which continue very faintly through the remainder of the scene. When music stops, Chorus speaks again and finishes his speech.43

As the Chorus finished describing the battle and left the stage, the diorama continued:

Scene passing on presents the landing, and assault of Harfleur—as it moves away it discloses on the stage the walls and gate of Harfleur massed with combatants.44

This same technique was used at the beginnings of Act IV and Act V. The Chorus, probably speaking from one side of the stage, was accompanied by the diorama. Figure 23 shows one view of this diorama, painted by Clarkson Stanfield.

Concerning the mechanical operation of this device, there is little to go on. The diorama cloth, probably between two cylinders, was placed downstage, immediately behind the drop curtain. This had to be so because in each

43Ibid., p. 366. 44Ibid.,
Figure 23

Henry V Diorama, Covent Garden (1839)

case a full scene was revealed behind it. Since there was a
break between each act, it would have been possible to change
the dioramic cylinders for each new display.

This last reviewer's comments, quoted above, indicate
that the final scene of each dioramic effect faded out or
blended into the similar stage scene almost imperceptibly.
This was probably accomplished by bringing up the lights
behind the dioramic cloth, allowing the audience to see
through the cloth onto the stage. Very likely it was an effect
similar to that which is often achieved today by using a
scrim cloth. Indeed, dioramic cloths must often have been
scrim-like in consistency.

The over-all purpose of the moving diorama in this
1839 production of *Henry V* was to provide both spectacle and
scenic transitions. The paintings supplemented the transi­
tional prologues which Shakespeare had already provided. Of
course, there was a certain redundancy about the device.
Shakespeare's poetic transitions were necessary for the non-
illusionistic stage of his own era. But the playgoers of the
nineteenth century were so enchanted by pictorial illusion and
spectacle that they probably saw no incongruity in a Chorus
who said, "Peace out our imperfections with your thoughts,"
while a marvellously perfect panorama of the whole scene
passed behind him.
Mr. Samuel Phelps employed panoramic scenery for a number of his famous Shakespearean revivals at Sadler's Wells theatre between 1843 and 1862, and in most cases his panoramic devices were used for transitional purposes. His production of *Timon of Athens* in 1851 and 1856 included a moving diorama which took the audience from a wood outside Athens to the walls of the city. A note in Phelps' prompt book for this scene reads: "... Diorama moves, showing a distant view of Athens, and gradually works to the Suburbs and eventually to the walls." When that portion of the diorama came into view which represented the walls of Athens, there was a sizeable cut-out in the cloth which revealed Alcibiades and his soldiers behind, as though they had been standing on the walls. Phelps at this point changed the original script to require the soldiers to march from the walls of Athens to Timon's tomb in the woods. A description of this effect appears in the prompt book:

> Music. Troops face about, Mark time, Diorama moves on and closes them in—They descend, and in a woody opening in Diorama shows them on their March[...]
> Again closed in, and Diorama worked entirely off R 2 E—showing Timon's Tomb.

In this instance the transitional diorama was used in a unique manner. Not only did the scene move from one locale

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45 *Timon of Athens*, Act V, Sc. 5, OSUTC Film 1056.

to another, but at various points along the route, through the use of cut-outs in the dioramic cloth, the audience could catch glimpses of the soldiers marching along. When the diorama reached its end, the soldiers were revealed marching from behind it and onto the stage. Of course, for the entire length of the trip they had simply been marking time behind the moving cloth.

An effect of this same nature was used in Phelps' 1854 production of Pericles. Act V opened with the stage representing the open deck of Pericles' ship off Mitylene. Behind the ship was stretched a diorama showing a view of the sea. In front of this diorama, but behind the deck of the ship, grooves were placed on the stage floor for the purpose of allowing an extra dioramic effect. As Pericles reclined on a couch on the deck, there was "soft haunting music. Dark cloud flats work on from R to L in Diorama grooves. When off discovers Diana seated surrounded by Moon and a Moonlight effect." The goddess Diana, then, appeared as in a dream behind Pericles' ship, but in front of the sea-view diorama. It would not have been necessary to remove the sea-view diorama for this effect, since a change of lighting on the dioramic cloth could easily have altered the view from sea to

47 Pericles, Act V, Sc. 1, OSUTC Film P. 1039.
moonlight. After commissioning Pericles to go to Ephesus, "The Clouds are worked back from L to R—Clear Diana Vision and set deck backing as before." Again the scene was the ship's deck with a sea-view behind.

Figure 24 shows a ground plan for this scene from the prompt book. It can be seen that the "Diorama to Ephesus on Cylinders forms the backing to the scene," while in front of it, directly behind the ship's deck, are "Diorama grooves for cloud flats to come."

Moving dioramas, like this cloud effect, were sometimes painted on flats. This technique, however, was probably only used when the diorama was to be very short, or when it was impossible to set up cylinders. In Phelps' production of Pericles, the cloud diorama not only was not required to be of great length, but another moving diorama was already required in the scene. It would very likely have been cumbersome to have two cylinder dioramas on the stage at the same time. Diorama flats were usually hinged together and pushed on stage in special grooves laid down for that purpose. Their effect may not have been as smooth as the cylinder dioramas, but they were undoubtedly less trouble to arrange for a short moving scene.

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48 Ibid., Act V, Sc. 1.

Figure 24

Prompt Book Ground Plan

Pericles' Ship off Mitylene, Sadler's Wells (1854)

ACT V.

[Scene: Euphrasia, in Bybliss. Scene, forms]

The backing of the scene.

[Scenery grooves for clouded half-tow.

[Scene: Entrance from the Milky Way Bridge.

[Scene: Entrance to cabin.

[Scene: Entrance place.}

[Scene: Entrance to cabin.

[Scene: Entrance place.}

[Scene: Entrance to cabin.

[Scene: Entrance place.}

[Scene: Entrance to cabin.

[Scene: Entrance place.}

[Scene: Entrance to cabin.

[Scene: Entrance place.}

[Scene: Entrance to cabin.

[Scene: Entrance place.}
After Diana had been removed, a spectacular, moving dioramic transition took place:

... When Pericles sails at last to the temple of Diana of the Ephesians, rowers take their places on their banks, the vessel seems to glide along the coast, an admirably painted panorama [read diorama] slides before the eye, and the whole theatre seems in the course of actual transportation to the temple of Ephesus, which is the crowning scenic glory of the play.50

If, as this critic reported, the audience felt as though they were actually being transported to Ephesus, Phelps' painters and machinists had succeeded in attaining the great effect of panoramic art: a complete sense of illusion. That was the real objective of all scenic transition panoramas.

Phelps' production of *A Midsummer Night's Dream* at Sadler's Wells in 1853 drew this reaction from Henry Morely of *The Examiner*:

Mr. Phelps ... knew that he was to present mere shadows, that spectators, as Puck reminds them in the epilogue, are to think that they have slumbered in their seats, and that what appeared before them have been visions ... There is no ordinary scene-shifting; but as in a dream, one scene is made to glide insensibly into another. We follow the lovers and the fairies through the wood from glade to glade, now among trees, now with a broad view of the sea and Athens in the distance.51

When moving panoramas were properly used for transitional purposes, it was this kind of effect which was

achieved: smooth, flowing, and natural. No mid-nineteenth century theatrical manager seems to have put moving panoramas to more tasteful use than did Samuel Phelps. Charles Kean copied Phelps' technique for the Princess's Theatre production of *A Midsummer Night's Dream* in 1856. The diorama, painted by Thomas Grieve for Kean's production, progressed through a wood near Athens. A portion of this painting is illustrated in Figure 25.

As late as 1881, when Daly produced *A Midsummer Night's Dream*, the same technique was still popular. Odell writes:

Daly followed the custom (established by Kean or Macready?) of giving a moving panorama, this time of the return voyage from the enchanted woods to Athens. The actors did not look particularly comfortable sitting or standing in the stationary boat while the scenery slid by. It was not quite as bad as Wagner's device of having Parsifal and Gurnemanz pretend to be walking while their journey was represented by sliding representations of scenes from the hall of the Grail to more customary localities below.52

Awkward for the actors or not, the use of a moving panorama to effect a scenic transition allowed the nineteenth-century theatre a degree of flowing continuity which was almost cinematographic in its overall effect.

Charles Kean's first moving panorama, a transitional device, was used in his spectacular 1855 production of

Figure 25

Woodland Scenery Diorama: *A Midsummer Night's Dream*

Princess's Theatre (1856)

Reproduced from OSUTC Film 893, Scenery for Charles Kean Productions. Original in the Victoria and Albert Museum.
Henry VIII at the Princess's Theatre. Kean, of course, was a stickler for historical authenticity in all of his staging practices. His attitude was, perhaps, more pedantic than theatrical, but the detailed accuracy of his scenery and costumes always provided his audiences with a rich spectacle.

In Henry VIII he used a moving panorama to cover his omission of the first four scenes of Act V, and he labeled the whole panoramic transition Scene 1. The panorama took the audience to Greenwich for the christening of the Princess Elizabeth at the end of the play:

ACT V

Scene I.—A Moving Panorama

Representing London, as it appeared in the Reign of Henry the Eighth, commencing at the Palace of Bridewell, and passing the Fleet Ditch--Blackfriars--St. Paul's--London Bridge--The Tower--Limehouse--The Celebrated Man of War, the "Great Harry" (copied from the model in the room of the Admiralty, Somerset House)--Barges of the Lord Mayor and City Council on their way to Greenwich, to attend the christening of the Infant Princess, Elizabeth, on 10th of September, 1533--Greenwich Palace, Park, &c., &c.

Figure 26 shows a portion of this panorama, which was painted by Thomas Grieve. It is possible, although there are no prompt notes to prove it, that the state barges pictured in

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53Merchant, op. cit., p. 108. 54Ibid.
55Henry VIII, Act V, Sc. 1, OSUTC Film P. 181.
Figure 26


Reproduced from OSUTC Film 894, Scenes from Charles Kean Productions. Original in the Victoria and Albert Museum.
the panorama were stationary pieces with actors, which remained in front of the panorama while it moved.\textsuperscript{56} Certainly this technique was popular with moving panoramas by 1855.

A year later, in 1856, Kean was accused of "... transforming the theatre into a prodigious panoramic peep-show," for his production of \textit{Sarandapalus}.\textsuperscript{57} Perhaps Kean could not resist the temptation to suit the play to the scenery, especially the moving panoramic scenery which allowed such splendid scenic transitions.

One final example of a scenic transition panorama should be given, particularly because it is of a relatively recent date. This was Richard Wagner's production of \textit{Parsifal} at Bayreuth in 1882. The panorama provided a transition for \textit{Parsifal} 's return from the Hall of the Grail. It has already been noted that the figures of Parsifal and Gurnemanz, marking time in front of the moving cloth, appeared somewhat ludicrous,\textsuperscript{58} but the painting itself was a splendid effort. The panorama is illustrated in Figure 27. Several years later a production of \textit{Parsifal} was planned at Covent Garden in London.

\footnotesize
\begin{itemize}
\item \textsuperscript{56}Mardis Glenn Wilson, "Charles Kean: A Study in Nineteenth Century Shakespearean Tragedy" (unpublished Doctoral Dissertation, The Ohio State University, Columbus, Ohio, 1947), p. 305.
\item \textsuperscript{57}Merchant, op. cit., p. 109n, citing \textit{Blackwoods Magazine}, LXXIX (1856).
\item \textsuperscript{58}See page 217 above.
\end{itemize}
Figure 27

Moving Panorama: Parsifal, Act III. Bayreuth (1882)

Reproduced from La Petite Illustration, No. 44 (January 3, 1914), pp. 16-17.
The scene designers, Joseph Harker and J. Comyns Carr, decided not to use the moving panorama, preferring to use a series of separate visions instead. However, they finally used it because, as Joseph Harker reports: "... nothing less, it was firmly believed, would satisfy the public or the critics."59

The use of the moving panorama as a scenic transitional device was widespread throughout the nineteenth century, for such a use enabled the theatres to include the panorama in a logical, legitimate manner. Panoramic scenery did not have to be abruptly inserted for sheer scenic spectacle. It could be used to forward the dramatic action of the play. The employment of the panorama in this way sometimes necessitated the rearrangement of the play to fit the transitions; or it required the writing of plays which were little more than vehicles for the moving panorama. In any case, the purpose of the scenic transition panorama was to charm and delight a pictorially oriented public.

V. SHIP, STORM, SEA SCENE PANORAMAS

While the moving panorama was found most convenient and adaptable for transitional scenes, it was nonetheless used to

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great advantage for scenes in which ships appeared in movement, most commonly upon a stormy sea. In some cases it is difficult to distinguish between the transitional and the purely spectacular aspects of these ship-storm-sea scene panoramas, since both elements were often present at the same time. A ship appeared on a stormy sea, with a panorama of billows, waves, and lightning moving rapidly behind it, accompanied by thunder, wind, and flapping wave cloths in front. This may have been a transitional scene, similar to the boat-ride panoramas which have already been noted, but when the storm scene became such a spectacular effect in its own right, the transitional aspects took second place to the exciting scenic display. It is convenient, therefore, to consider these moving panoramas, whether transitional or not, as being primarily spectacular ship-storm scenes, which allowed the audience thrills and excitement rather than the more quiet appreciation of pictorial beauty.

In the ship-storm scenes the moving panorama was no more than one spectacular scenic element among many. Its purpose was to provide a realistic scenic background, as only one ingredient of a well-integrated scene including ships, waves, sound effects, lightning effects, and numerous actors yelling, drowning, or climbing about the stage. Unlike most of the transitional panoramas, and certainly unlike the pictorial
panoramas of the pantomimes, the ship-storm panoramas were most effective when they were not the only spectacular ingredient of the scene. They were blended with all the other ingredients to produce an over-all display of spectacle. The moving panorama, in these cases, was still a realistic, illusionistic device as it had always been, but it no longer received star billing. It became one important element in a smooth-working ensemble of separate scenic parts.

This being the case, the amount of extant information on the ship-storm-sea scene panoramas is naturally limited. Audiences took little special notice of the device, since it did not stand out in its own right. Besides, very exciting things were often happening in front of the panoramas. Present day moviegoers often miss the beautiful scenery in a film because a battle or massacre takes place closer to the camera. In like manner the moving panorama in storm scenes often went along virtually unnoticed, so powerful was the over-all effect. Prompt notes frequently offer little more information than that a panorama was used as backing to the scene. Critics sometimes did not even mention the panorama's employment at all, merely commenting that the effect of the storm was realistically and powerfully staged. It is likely, therefore, that the panorama was used in scenes of this kind much more frequently than extant evidence indicates.
One development, however, is clear. The ship and storm panoramas were legitimate scenic elements, used to accomplish legitimate dramatic purposes. The device was no longer a spectacular effect, brought in because the audience had found it entertaining in the exhibition halls. In these cases it was used as all scenery should be used—to establish locale, to clarify the conditions of the scene, and to intensify the mood or impact of the dramatic action. This employment of the panorama is more closely allied to the moving cloud effects of De Loutherbourg's device than it is to the pictorial panoramas and dioramas of the exhibition halls and the pantomimes.

The play in which a ship-storm panorama was used most often was Shakespeare's *The Tempest*. The first scene was almost made to order for the kind of realistic, spectacular mounting in which audiences of the nineteenth century took such delight. A heaving sea, a howling gale, a doomed vessel, and a continual slashing and crashing of lightning and thunder were the marvelous ingredients of this scene as it became popular and familiar to Victorian audiences. The play provided wonderful possibilities for the machinist and the scene painter to work their combined skills.

The earliest evidence of a use of a moving panorama in *The Tempest* is from William Macready's production in 1839 at
Covent Garden, but the production which had the most influence on future staging methods for the first scene of the play was presented by Samuel Phelps on April 7, 1847, at Sadler's Wells. The prompt book files of the Ohio State University Theatre Collection contain three prompt books which are direct copies of Phelps' prompt book for his 1847 production. Most other printed scripts contain staging directions which are very similar to those first employed by Phelps.

Notes for the first scene of *The Tempest* in Phelps' prompt book read:

Scene 1st—A Calm Sea, with double row of Trick Waters, to change to rough Sea. Ground piece to work down with Sea Cloths attached to Float at given signal. The Neapolitan Fleet begins to pass as a Panorama as the Curtain ascends. As the Fleet works off OP a Storm Horizon of Clouds &c. in which Spirits of every imaginable and fanciful Form are represented as assisting. The Clouds seem to be rushing along as with a tempestuous blast. They are of Gauze. When the Panorama is fully on, the light Flats of 1st Calm Sea work off at back so that when the Gauzes are off the Dark Storm Horizon is discovered, and two additional rows of Storm Waters... Thunder-Lightning-Rain & Wind begin to work as Cloud Panorama comes on, and increased as scene progresses—till it rages with all possible fury—Lights worked accordingly.

60 Prompt note in *The Tempest*, Act I, Sc. 1, OSUTC Film P. 34.


The panorama was used for two purposes: to give a full view of the sea horizon with the Neopolitan Fleet passing by, and then to give the effect of storm clouds and winds following close after the fleet. The passing of the fleet need only have been a short moving panorama, perhaps painted on flats and pushed across the stage in panorama grooves. The clouds, however, "rushing along as with a tempestuous blast," were most likely represented on a lengthy panorama cloth which was unwound between two cylinders. It will be noted that the panorama in this case was only one of many spectacular scenic elements. A newspaper review of this production stated:

The scenery by Mr. Fenton and Mr. Findlay deserves a high commendation, as displaying great imaginative and executive power in both these artists. The first scene, in particular, the rising of the storm, was, when we take into consideration the dimensions of the theatre, perfectly wonderful.63

There is no special mention of the moving panorama, which indicates, in this case, that it was not employed as a scenic novelty but as a corporate item in the scene. It should be noted, however, that the reviewer's reference to the scene as being "perfectly wonderful" was undoubtedly praise for the realistic and illusionistic qualities of the scenery. Since the panorama was the item which afforded the greatest sense of

63 OSUTC Film 1462B*, unlabeled clipping.
movement to the scene, it was probably the most significant illusion-producing unit on the stage and was, therefore, largely responsible for the "perfectly wonderful" illusion. At any rate, it can well be imagined how relatively uninteresting the scene would have been without the panorama. Shakespeare's lines have a magnificent sense of excitement and movement, and, if the scene is to be staged at all, the scenic elements should give the same, fluid, fast-moving impression.

The machinists and scene painters often overwhelmed Shakespeare in the nineteenth-century productions of The Tempest. Sometimes the lines for the first scene were deleted entirely, so that nothing would interfere with the spectacle of the storm. On other occasions the scene was placed at the end of the first act, perhaps to allow more dramatic buildup for the spectacle.

The use of the panorama in this famous scene, however, remained much the same in most nineteenth-century productions. Differences were mainly concerned with aspects of mechanical mounting and the information is too brief to allow any satisfactory reconstruction of these devices. Two prompt book

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references, however, are worth noting. The first is from a production of *The Tempest* at Burton's Theatre in New York in 1854, in which William Burton played Caliban. The prompt notes for the first scene state:

> The walls all round lined by Panorama of Stormy Sea—Rock pieces to conceal men who work shaking waters. Stage quite dark—Borders not lighted. A great effect of distance produced by one of the fiery meteors disappearing through the window at back of the stage. At Light house rigged on a wire—to travel from L to R.

> Have a Panorama groove in 1 G—work on continuation of storm, ending in 2d scene, to take not more than 3 half flats.

These notes indicate the use of a somewhat circular or semi-circular panorama, enveloping the scene much as a cyclo­rama horizon does today. This may well have been the case, since the enveloping horizon cloth was beginning to be used about this date, but the prompt book notations do not contain sufficient information to establish the exact nature of the device. The prompt notes also indicate the use of a second panorama, downstage in the first grooves, to end the first scene and merge into the second. The lighthouse on a wire, which moved across the stage, was a counter-moving

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apparatus employed to increase the illusion of rapid movement. The realistic effect of all of these devices, of course, depended on the smoothness of operation, which is an unknown quantity, unmentioned in most reviews and unspecified in prompt books.

The second prompt notation of interest is found in George Beck's prompt book for a production of The Tempest at the Grand Opera House, New York, in March, 1869. The note is from the scene plot:

Sc. 1st. Working vessel C from 1 to 4:
Seacloth attached—gauze borders with long tabs reaching to the seacloth in 2, 3, & 4 [grooves].
Panorama sloat to work and winds across from L to R.

Large profile rock with storm daemons to come on L 4th grooves at signal; Lightening [sic] flats to pass slowly.°

There are two items of special interest in these notations. The first is the "panorama sloat," which indicates that the two panoramic cylinders and the cloth stretched between them were raised from below or lowered from above the stage, used in the scene, and then removed in the same manner. A device of this kind was undoubtedly used often to clear the stage quickly of the cumbersome panoramic equipment. The second reference is to the "Lightening flats pass slowly."

°The Tempest, Act I, Sc. 1, OSUTC Film P. 34, op. cit.
This indicates that the moving storm panorama had cut-outs, through which the audience could occasionally see flashes of lightning, which were painted on a row of panoramic flats behind the storm panorama. It must be remembered, also, that in all of these instances, dioramic effects were probably employed to enliven the effects of lightning, clouds, and moonlight.

There are few other plays of major significance which, like *The Tempest*, contain scenes which are almost ready-made for a shipwreck, sea-storm spectacle. However, ample uses for the panorama were found in the nineteenth century, when significant drama ran a poor second to lavish melodrama. Many of the melodramas were totally perishable as far as their contribution to dramatic literature was concerned, but as exciting, fast-paced, illusionistic spectacles they were memorable and greatly popular. It was an era when the scene painter and the machinist superceded the dramatist. One such piece, in which the panorama played a major role, was a burletta written by James Robinson Planche in 1830, and called *Paris and London*. A prompt book in The Ohio State University Theatre Collection was used for an 1853 production of the play at the Boston Museum.69

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At the beginning of the third scene of Act II, a party of entirely farcical characters are found boarding a packet at Calais for a trip to Dover. The scene aboard the packet is the interior of one of the cabins. Through a window at the rear of the cabin a panorama of the wharves of Calais and then the open waters can be seen passing by. This continues through approximately fifteen minutes of dialogue, during which time several of the characters express feelings of sea-sickness and reel occasionally as if with the roll of the boat. The prompt notation in reference to the panorama at the beginning of this scene states: "1st movement of Panorama."70

The next scene is on the deck of the packet. The scene directions read: "Scene IV. Deck of the Steamer--Moving Panoramic View from Calais to Dover, by various painted Flats to the Scene--the Sky very dark--Sea running high--thunder and lightning."71 The prompter's note at this point reads: "Long Panorama,"72 indicating that there were two panoramas: a small one outside the window of the cabin in the third scene, and a large one behind the deck of the ship in the fourth scene. After a short period of dialogue, in which sea-sickness and the possibility of everyone's being

70Ibid., opp. p. 32.  
71Ibid., p. 35.  
72Ibid., opp. p. 35.
thrown overboard are the main topics of conversation, the stage directions state: "Stage becomes progressively light," and "The moving panoramic scene has continued—the storm clears off, and Dover Cliffs, Town, and Castle gradually come into view." Then, following loud cries from the sailors about easing the boat into the dock, "The scene stops, and the noise ceases."

All of this, of course, had a great deal more to do with the panorama than with the drama. It is a typical example of the manner in which ship and storm panoramas were used to add excitement and suspense to a slim and unimaginative plot. It must be admitted, however, that the scene was undoubtedly entertaining to watch, and it is probable that present-day audiences, like those of the nineteenth-century, would be delighted with the comic spectacle.

Another mediocre melodrama illustrates the versatility of ship-scene panoramic scenery. The play was called Money Mad, and it opened at the Standard Theatre, New York, on April 7, 1890. Money Mad was a re-working of an earlier melodrama called A Noble Rogue, which was in turn an adaptation from Steele MacKaye's Through the Dark, first produced in 1879. In the course of the play the villain chased the

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73 Ibid., p. 36.  74 Ibid.  75 Vardac, op. cit., p. 136.  76 Ibid., p. 137.
hero's father over a drawbridge. The drawbridge opened, preventing the hero from rescuing his father, who fell into the water below and was drowned. As the drawbridge opened, and swung out over the audience, a steamer passed through the opening. This steamer was represented on a long panoramic cloth with various dioramic lighting effects, such as the lights within the cabins of the vessel. In a San Francisco production of the play, the panoramic steamer was 112 feet long.77

The ship panorama for this play was probably made of gauze, with a heavier cloth in the shape of a ship affixed to it. In this manner the ship would appear to glide across the stage without visible means of support.

In none of the panoramic examples which have been noted thus far has there been any certain indication of the mechanical operation of the device. Prompt books have offered some information concerning the placement of panoramic units upon the stage, but prompt notations leave the mechanical specifications entirely up to conjecture. Fortunately, Georges Moynet troubled to write in some detail the specifications for mounting a panoramic unit in a late nineteenth-century French farce.78 The farce contained a rather unusual and

77 Ibid.

78 Georges Moynet, Trucs et Decors (Paris: A Librarie Illustree, 1893), pp. 91-95.
highly realistic ship-storm scene, and the panoramic specifications, while of a late date, offer some indication of how these devices were normally mounted in the latter part of the century.

Figure 28 shows the scene of interest as it appeared to the audience. The ship is sailing away from the audience into a stormy sea. The passengers inside the heaving vessel are being thrown about the cabin, over the floor, onto the ceiling, and through the piano. The persons involved in this scene must have been more acrobats than actors.

The major staging problem, aside from rocking the boat and ruffling the waves around it, was to give the effect of a stormy horizon with the ship moving into it, not past it. Figure 29 is a ground plan of the setting. It will be noted that two panoramas were employed, running from E to C and from F to D, toward the audience. The ship rocked in the middle of the stage and masked the unwinding cylinders at E and F. Tormentor flats masked the winding cylinders at C and D. As both panoramas, painted with storm clouds and waves, moved toward the audience, the effect was one of a ship heading directly into a storm and away from the audience. Moynet specifies that each panorama was 40 meters, or approximately 44 yards long, and 6 meters, or approximately 7 yards high.79

79 Ibid., p. 91.
Figure 28

Double Panorama Ship-Storm Effect

Figure 29

Ground Plan: Double Panorama Ship-Storm Effect

Reproduced from Georges Moynet, Trucs et Decors (Paris: A Librarie Illustree, [1893]), p. 83.
The curving course of the panoramas was probably used to give a greater illusion of depth and distance.

When the curtain rose, the panoramas were rolled up on the rear cylinders almost in their entirety. Presumably there was an unpainted lead-in cloth which was already attached to the two downstage cylinders. As the panoramas began to work, the plain lead-in cloth wound quickly onto the downstage cylinders and the painted storm horizon began to appear. Moynet specifies that the cylinders, both front and rear, did not rest on the stage floor. The cylinders were only about one meter in length and they carried only the top portion of the panoramas. The full length of the panorama, which went down to the floor and was masked by the waves, hung freely, like a moving traverse curtain.\(^8\) Undoubtedly, however, the bottom of the panorama cloth was in some manner weighted so that the panorama did not billow and flap as it moved.

Figure 30 shows one of the four cylinders, from which and upon which the panorama was rolled. It was suspended from the grid on a long, sliding shaft. The cylinder itself was composed of three parts: A, a drum around which was worked a cable to wind or unwind the cylinder, the cable being operated from a winch at the side of the stage; B, a small drum around which the supporting cable of the panorama

\(^8\)bid., p. 92.
Figure 30

Panorama Cylinder

was wound; and C, a slightly larger drum which payed out and received the top several feet of the panorama cloth. The four cylinders could be raised into the flies at the end of their use to disengage the scene. When they were raised, the two downstage cylinders took the rolled panorama up with them.

It was by no means usual to run the panorama cloths from truncated cylinders, as accomplished in this particular case. More typically, the panorama was run between two full-length cylinders, as will be seen in the next section of this chapter. However, the curved course of the two panorama cloths illustrated in Figure 29 was undoubtedly managed more smoothly by having only the tops of the panoramas attached to the cylinders. Had the panoramas been attached to cylinders at the bottom also, there would have been considerably more friction pulling against the entire apparatus, and the cloth would have tended to pull in tautly at the bottom, unless some kind of cumbersome track was arranged for the bottom edge of the cloth to run in. As long as there was some weight, such as a chain within a hem at the bottom, the cloth would not wobble noticeably. By having cylinders at the top only, the whole device could be disengaged much more easily and rapidly.

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81 Ibid., p. 94.
The two panoramas had to have some kind of track at the top to keep them from sagging and to maintain their curved courses. Figure 31 is a detailed view of the device used in the play under discussion. It ran the entire length of the panorama, from cylinder to cylinder. It consisted of a series of rectangular frames which were suspended from above, and which were hinged horizontally together in such a manner that they followed the easy arc of the panorama's course. This frame was 40cm, or approximately 13 inches in height.\textsuperscript{82}

To the bottom of this frame, all the way along, were suspended two rectangular strips of wood. They were held steady by angle irons and were attached so that a small space or crack was left between them all along the course of the frame. Figure 31 shows these two wood strips clasped to the frame by angle irons. Between them ran the top of the panorama cloth. Above them, but underneath the frame ran the stout cord to which the cloth was attached. The cord was wider than the crack between the two pieces of wood and thus could not slip down. The top of the cloth, running inside the crack, kept the cord from slipping off to either side. The portion of the cloth which ran between the two pieces of wood was not the panorama painting itself. It was a strip of

\textsuperscript{82}Ibid., p. 92.
Figure 31

Panorama Guide Track

strong but smooth webbing which wrapped around the guide cord at the top and was sewn to the top edge of the panorama cloth.\textsuperscript{83}

The sweeping lateral curves of the frames were maintained by a number of guy wires which extended from the two frames to the back wall of the stage. Moynet does not diagram the placement of the guy wires, but an illustration from Sonrel's \textit{Traité de Scénographie}, reproduced in Figure 32, clarifies their probable operation. The wires, indicated by the broken lines in Figure 32, were spaced and attached along the curve of the framework, then were drawn to two wells at the rear of the stage, where counterweights were attached to each one of them, according to the stress necessary to maintain the curve in the framework at each point where the wires were attached. It was better to use counterweights to pull the framework into position than to attach the wires immovably to the wall. In this manner the curved framework was allowed a certain amount of give, in case the panorama cord should become stuck.

With this technical information at hand, the entire ship-storm panorama scene can be reconstructed. The scene was set with a cut-away ship in the center of the stage, supported on rockers. The ship masked two panorama cylinders at the rear-center of the stage. Two panorama cloths were

\textsuperscript{83}Ibid., p. 93.
Figure 32

Lateral Maintenance of the Curved Panorama

plan au niveau du plateau.
stretched from these to two cylinders at the front of the stage, right and left of the proscenium opening. The cloths travelled in a slight arc away from the center of the stage and were suspended from a guide track above. As the curtain opened, the lead-in cloths of the panoramas began to move onto the downstage cylinders. Soon the cloth began to represent storm clouds, dark skies, and huge waves. Wave cloths in front of the boat were whipped about, and concealed stage hands rocked the boat. When the actors or acrobats inside the boat had been knocked about sufficiently, and had reached postures of farcical hilarity, the curtain closed on the spectacle. What remained of the panorama cloths was wound onto the downstage cylinders, which were then raised into the flies, as were the two rear-stage cylinders. The frameworks, through which the panoramas had run their course, were lowered to stage level, disengaged, reattached to other ropes or battens, and lifted out of the way. It is interesting to note that this framework, which was used to guide the panorama cloths, was called a patience. It was so called because the task of threading the cord and cloth through the guide tracks required a considerable amount of patient maneuvering. It must also have required a considerable amount of time, and it is doubtful that the entire apparatus could have been

84Ibid., p. 92.
set up during a quick scene change. It would have required at least a full intermission act break to arrange it at all. Its disengagement, of course, was a relatively quick and simple matter.

The ship-storm-sea scene panorama, in either significant plays like *The Tempest*, thrilling melodramas, or farcical stunt plays, was a popular scenic device throughout the nineteenth century. It allowed a legitimate theatrical use for the panoramic paintings, and, above all, made use of the illusionistic capacities of the panorama to the fullest. Because the scenes in which these ship-storm panoramas were used were usually quick-moving, dimly lighted, and filled with a number of other equally spectacular scenic devices, they were probably among the most theatrically effective and well-integrated scenes in which the moving panorama was used. In the ship-storm scenes, at least, the moving panorama was not a mere novelty or pretty picture, but an important scenic element, without which the scene would have lost a great deal of its excitement and illusion. And it was, it must be remembered, excitement and illusion which the latter nineteenth-century theatre tried most resolutely to supply.
VI. RACING SCENE PANORAMAS

Interest in horse racing dramas probably began in the early years of the nineteenth century when Philip Astley established and made popular his equestrian dramas. In these plays, which developed from circus acts, the actors appeared on horses and galloped around an arena in front of a stage. By the middle of the nineteenth century the equestrian dramas had gained such popularity that Batty's amphitheatre in London could produce Richard III and give Richard's horse star billing. 85

It was with H. M. Milner's equestrian spectacle, Mazeppa, that the moving panorama came to be used as a background for a galloping horse. The play was first produced at the Royal Amphitheatre, Westminster, on April 4, 1831. This was a very early date for the inclusion of a moving panorama into any kind of play. Of course, it is not startling to find that the manager of an equestrian theatre wholly dedicated to fast-paced spectacles, should be one of the first to visualize the spectacular potential of the moving panorama. The 1831 production of Mazeppa was staged by Andrew Ducrow, who was almost entirely illiterate, but who was an excellent rider and an imaginative producer of equestrian plays. 86

86 Ibid.
It was in Act II, Sc. 1 of Mazeppa that the moving panorama was used. The stage directions of the script read:

Scene 1—Moving Panorama of the Course of the Dnieper River, running from L.U.E. to R.U.E.—on the flat is seen its banks, within a tract of wild country—a tremendous storm of thunder and lightning, hail and rain.  

A wild horse galloped onto the scene with Mazeppa, the hero, strapped to its back. Mazeppa had been placed in that awkward position by the villains of the piece. The horse stood still long enough for Mazeppa to establish the fact that he expected death momentarily from either exposure or the rough gallopings of the horse. Then:

The horse gallops off with Mazeppa, R.—Music.—The storm abates, the sun rises, and the panorama begins to move—the horse, still bearing Mazeppa fastened to his back, is seen wading up the stream, from R. to L.  

The horse, after running off with Mazeppa, reappeared further upstage, walking in front of a moving panorama which represented a river. The desired effect was to have the horse appear to be walking through the water along the river's bank. It could not have been a long panorama or a fast-moving one, for the panorama was painted on flats, which were pushed slowly across an opening. The horse probably marked

87 H. M. Milner, Mazeppa, Act II, Sc. 1, OSUTC Film 348, p. 35.

88 Ibid.
time, as circus horses are commonly seen to do. There is no indication that the horse was on a treadmill. The whole effect was probably quite brief, and was included only as a way of adding pictorial illusion to the equestrian spectacle. After the panorama had been worked out of view, the horse charged off once more and was seen to be "... furiously pursuing his course among the mountains, crossing first from L. to R., backwards and forwards over the range of hills."^9 This play established the use of the moving panorama as a spectacular and illusionistic element in plays with horses and horse races. As with the ship-storm panoramas, horse race scenes were written into plays, or full length plays were written around them, just to make use of the spectacular possibilities of the moving panorama.

It was not until the latter part of the nineteenth century, however, that the horse race panoramas came into extensive use. The main reason for this was not that the public did not find them entertaining, but that without considerable electrical equipment the horse race scenes were too difficult to stage. In order for horse race scenes to be effective, it was necessary to turn the whole stage floor into a mechanical apparatus, with electric motors to power the treadmills, belts, cylinders. The expense of such equipment

89 Ibid., p. 36.
was also considerable, and it was not until the pattern of the long-run production was established that such plays became financially feasible. The device used in Mazeppa was a relatively simple contrivance. But the great horse race plays of the 1880's and 1890's required a wealth of equipment, power, and control which the mid-nineteenth-century theatres did not possess or could not afford.

The first spectacular horse race scene occurred in the fourth act of a play called The County Fair, which opened at Proctor's Theatre in New York in March, 1889, and moved later to the Union Square Theatre. It was a popular play, running for four years in New York and was still being revived as late as 1914. It was undoubtedly the spectacular race scene which accounted for the play's popularity:

The effect is really wonderful. The electric lights in the theatre are flashed out, and after a few moments of inky blackness the flying horses appear at the back of the stage in a blaze of light. They seem to be straining every nerve and fairly flying past a varied landscape. Fences and trees disappear behind them with startling rapidity, and when at last the finish is near, one of the horses gradually works forward, winner by a neck as he approaches the judges' stand; then an instant of darkness, and in the flash of light that follows,

90 Vardac, op. cit., p. 75.

91 "Electricity Behind the Stage," Scientific American Supplement, XXIX, No. 748 (May 3, 1890), 11954.

92 Vardac, loc. cit.
the horses are pulled beyond the stand and the race is won.93

Figure 33 indicates how this scene appeared on the stage. The moving panorama was not a long painting of many hundreds of feet, but rather an endless belt of painted canvas wound around two cylinders. When the horses began to gallop, as though toward stage left, both cylinders began to wind toward the right, carrying the belt of canvas around them in a continuous fashion. This technique did not allow for a great variety in the background scenery, since the same scenic view passed by. However, the panorama moved so swiftly that the audience was probably not bothered by the repetition. Such a technique also allowed a more sure and rapid movement of the canvas. The canvas belt was stretched tautly between the two cylinders and the pressure exerted on the cloth in this manner prohibited it from sagging. The sequence of the scene required split-second timing and close coordination of all the working parts:

At the close of the third act, the large screws shown in the figure [Figure 33] are set in motion, and lift the working mechanism of the play up to the level of the floor which had previously covered it. Three flexible endless platforms, passing over rollers at the sides of the stage serve to complete the illusion by enabling the horses to be in rapid motion without actually moving forward . . . . They are secured by wire rope traces.

93"Electricity Behind the Stage," op. cit., 11954.
Figure 33

Horse Race Scene: The County Fair, New York (1889)

Reproduced from "Electricity Behind the Stage," Scientific American Supplement, XXIX, No. 748 (May 3, 1890), 11954.
ELECTRICAL DEVICES IN "THE COUNTY FAIR," AT THE UNION SQUARE THEATER.
At the proper time, as the race nears the finish, the platform upon which the winning horse is stationed, is gradually slipped forward on a track for the purpose until the finish. The space between the fence and the scenery is 14 feet.\textsuperscript{94}

The fence, which was also on an endless belt like the panorama, probably did not move as quickly as the painted background, thus allowing a better illusion of distance. The arrangements of the treadmill cannot be seen clearly in Figure 33, and it is not known whether they were operated electrically or whether the forward thrust of the galloping horses caused them to move automatically. There was a wind-machine funnel on stage left. It blew a fast stream of air toward the horses to make their manes and tails ruffle.

The methods used in \textit{The County Fair} set the precedent for other horse race scenes. Some attempts were made to produce the same illusion with a revolving stage,\textsuperscript{95} but the panorama-treadmill combination continued to be the most popular. Perhaps the most amazing aspect of the whole scene was not the apparatus itself, but the lengths to which the late nineteenth-century theatre was willing to go in order to produce a realistic illusion upon the stage.

\textsuperscript{94}Ibid.

In 1891, at the Theatre des Variétés in Paris, an exciting horse race drama was presented, called Paris Port de Mer. The concept and operation of the race scene was probably adapted from The County Fair, which had opened in New York two years before. Figure 34 shows two views of the scene: one as from the audience, and the other a cut-away view of the scenery and apparatus. The panorama, it will be noted, was not a continuous belt, as in The County Fair, but the familiar cylindrical roll, passing behind the scene from one cylinder to another.

... the canvas in the rear 95 yards in length, representing the panorama of the country as seen from the stands at Longchamps. This canvas, which is first wound around a vertical cylinder on the right hand side of the theatre, unwinds therefrom and afterwards winds around a duplicate cylinder on the left hand side of the theatre. The two cylinders are set in motion by a windlass maneuvered by manual power.

The bottom view of Figure 34 shows the treadmill arrangement upon which the horses ran. Unlike The County Fair, the treadmills here do not appear to have slid forward in order to allow one horse to win the race. Rather, a stage hand stood at stage left and controlled the electrical speed of the treadmills, so that by slowing down the rotation of any one of them, the chosen horse could move a few feet ahead.


97 Ibid.
Horse Race Scene: *Paris Port de Mer*, Paris (1891)

RACING HORSES ON THE STAGE—EFFECT FROM THE AUDIENCE.

RACING HORSES ON THE STAGE—MACHINERY UNDER THE STAGE FOR DRIVING ENDLESS BELT.
of the other two. The tracks upon which the horses galloped were made of endless matings of cocoanut fiber. The fence in the front was composed of a stationary horizontal railing which ran across the full length of the stage and into the wings on each side. The pickets of the fence moved like spokes sticking out from a wheel. This technique allowed the endless belt onto which the pickets were attached to move more freely and easily.

The top illustration in Figure 34 shows a group of actors standing just outside the fence viewing the race. Perhaps this was a mere whim of the illustrator, or perhaps a certain amount of dramatic license must be granted even to scenes of realistic illusion, but it is patently ridiculous to have the fence and the panorama flash by the actors, while the horses, which should be the ones to flash by, remain almost stationary. If the actors were directed to stand there, the illusion must have been considerably diluted.

The scenery painted on the panorama in Paris Port de Mer was very likely a realistic representation of the landscape within the track at Longchamp's race course. The horses in this play travelled from left to right on the stage, rather than from right to left as in The County Fair, for such is the custom of European race tracks.

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98 Hopkins, loc. cit.
By far the most spectacular and most popular horse race scene of all occurred in the famous dramatization of General Lew Wallace's epic novel, Ben-Hur. The play opened at the Broadway Theatre, New York, on November 29, 1899, and became one of the most successful plays ever to be presented on the American stage. It was, of course, a production of great scenic splendor, and perhaps the most splendid and spectacular scene of all was the chariot race scene, in which Ben-Hur and Messala raced to the death around the ancient circus at Antioch. It was certainly the climactic scene of the play:

The climactic chariot race was run on a treadmill by real horses dragging real chariots. A wheel of Messala's chariot was geared to work loose and fall off after a given number of revolutions. Ben-Hur's treadmill was drawn into the lead a second before the lights went out. Uneven wheels were calculated to give the chariots a bumping, rough-riding effect. Behind the galloping horses and bouncing chariots passed the panorama with its painted arena and spectators. Its purpose was to heighten the realism of the race which was ostensibly being run in a circle.99

Figure 35 shows the chariot scene. The panorama, it will be noted, was in three parts: a rear section and two side sections. One report has it that the treadmills were also shaped in a circular fashion to increase the illusion

Figure 35

Chariot Race Scene: *Ben-Hur*, New York (1899)

of an arena, but this does not appear to be the case in Figure 35. A low wall, not pictured in Figure 35, passed by the front of the stage, in a manner similar to the fences in The County Fair and Paris Port de Mer. The wheels of the chariots did not rest on the treadmills. They were supported off the ground a few inches and were powered by small electric motors underneath the chariots. The descriptive quotation above claimed that the wheels were uneven in order to give a bumping ride, but Figure 35 clearly shows that only the horses, not the chariots, ran on top of the treadmills. It is possible, of course, that the wheels bumped along the treadmills in some later production, but such an arrangement, it seems, would have been highly dangerous and difficult to control.

It is more probable that the wheels revolved separately from the treadmills and the bumping effect was achieved by springs within the structure of the chariots. The treadmills had to accommodate eight horses: four blacks abreast Messala's chariot and four whites for Ben-Hur's. The entire scene lasted approximately forty seconds.

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101 Vardac, op. cit., p. 80.

The three panoramas were, like the single one in The County Fair, composed of three continuous or endless belts of canvas. Again, this technique was used because of the rapidity with which the panorama had to move. The painted representation of the crowded Antioch arena flew past so swiftly that the audience had little time to notice that the background was reduplicative. With the excitement of the race in the foreground, it is unlikely that the panorama attracted direct attention. An article in the Scientific American specified the mechanical operation of the panorama:

A large part of the illusion depends upon the background, which gives the idea of positive motion, and the one . . . invented by Mr. [C. L.] Hagen is very novel. It embodies means for mounting and driving travelling aprons [read panoramas] at the rear and sides of the stage, so as to prevent any break in the scene, and this, of course, gives the audience the impression of change of scenery, as in the illusion the spectator follows the racing horses. At the rear of the stage is an endless apron [see Figure 35], flanked on each side by smaller endless aprons, each of which is complete in itself, but are operated in unison. When not in use the side aprons may be folded back against the rear apron; but while the scene is being "set" for the chariot race they are extended to the position indicated in our engraving. Upon these aprons are painted representations of the background of the scene; in this case representing the antique circus at Antioch filled with spectators. The reference will be understood by reference to our engraving [Figure 35]. Directly below the chariots will be seen the electric motor which actuates all three aprons of the panorama. It is a five-horse power Lundell motor, and it is operated at the proper time by the assistant, who stands at the switchboard and who receives the signal of the stage manager by a flash of a colored electric lamp. The motor is started manually. A twisted belt imparts
motion to a vertical shaft upon which are three pulleys, one to receive the power from the counter-shaft and the others to transmit the power to the ends of the vertical shafts, which each carry a cylindrical drum, around which the aprons are passed. Their rotation causes the aprons to travel continuously, and gear wheels are provided [Figure 36]... which impart motion to the side aprons, so that they are all driven in the same direction, and to the spectator the three aprons appear to be a continuous, unbroken scene. Notwithstanding the fact that the panorama is 96 feet wide and 25 feet high, the three panoramas are all rotated at a speed of 2,000 feet per minute by a two-horse power motor. The ease with which this enormous extent of canvas is driven is largely owing to the method of suspension [see Figure 36]. There is an endless track mounted rigidly on and extending between the outrigger-structures at the two ends, and upon this the wheels or rollers are mounted to run on the tracks. The wheels or rollers are secured to hangers which are attached to a belt which runs around the upper portions of the drum to which the panorama apron is fastened. By these means the apron is suspended in the proper position, and it is caused to turn true around the drums without crinkling or being subjected to other distortion. The lower edges of the apron are provided with a belt mechanism, similar to that at the top, which serves to keep the bottom edge of the apron in a proper position. The belts also serve to receive the power transmitted by the drums, which arrangement avoids straining the apron, as would be the case were the apron engaged directly with the drums. These hangers are shaped as frustums of a cone and are mounted by ball bearings on the spindles which carry them.103

The entire apparatus required eight minutes to set up on the stage. The large rear panorama was permanently positioned throughout the play. When the time came to set the

Figure 36

Detail of Panorama: Ben-Hur, New York (1899)

scene, the two side panoramas, which had been folded up against the front of the rear panorama, were pulled out to form the sides of the arena. The floor boards were removed to expose the treadmills, the chariots were rolled into position and adjusted, and the horses were attached. There was also a dust machine which blew a fine vegetable dust from a hole in the stage near the chariot wheels. This was included as an extra illusionistic effect, along with several ground rows in front of the chariot wheels, which moved across the stage with decreasing rapidity as they were placed farther upstage, in order to strengthen the illusion of perspective. 104

When *Ben-Hur* was toured throughout the United States in 1902, the management faced a considerable problem in logistics. The chariot race apparatus weighed forty tons, and carpenters often had to spend days ahead of time shoring up provincial stages so that they could carry the burden. 105

There is also some indication that the panorama for the touring company had to be simplified. When *Ben-Hur* played the English Opera House in Indianapolis in 1902, the panorama

104 *Ibid.*. The moving front wall [cf. footnote 101] must have been made of pickets to allow the audience to see the moving ground rows. Or else these two devices were used for different productions.

105 Shepard, *loc. cit.*
consisted of "... 3,600 square feet of painted canvas, revolving as an endless belt around two enormous spindles."\textsuperscript{106} It is likely that only one rear panorama was used, to facilitate staging in theatres of different shapes and sizes across the country.

Few attempts at spectacular realism on the nineteenth-century stage compared to the production of \textit{Ben-Hur}. The play strained stage facilities and stage managers' imaginations to the fullest. Surely such a cumbersome, expensive device as was required for the chariot race, would not have been employed unless there was no other way to satisfy public tastes. And yet, with all of its splendid machinery, the result was not completely satisfying, at least not to a reviewer of the New York \textit{Herald}, November 30, 1899, who wrote:

There was movement, but no action. It was impulse, but no race. It wanted an arena, a round track, not a flat one. It wanted the idea of the clatter and the dust and the turmoil.\textsuperscript{107}

At the close of the nineteenth century the stage had about reached its capacity for the realistic representation of sheer spectacle. Plays like \textit{Ben-Hur} did about everything that a theatre was capable of doing. When the stages began

\textsuperscript{106}Ibid. \hspace{1cm} \textsuperscript{107}Vardac, \textit{op. cit.}, pp. 80-81.
to creak under the great weight of the spectacular mountings, the time had come for a change. As will be seen in Chapter VI, the panorama was one of the devices which had to be dispensed with when the change occurred.

One other horse race play which used a moving panorama deserves mention. It was The Whip, which opened in London's Drury Lane theatre in 1913 and ran for two years. By the second decade of the twentieth century, spectacle plays of this kind were happening less and less frequently, and it is not surprising to find The Whip referred to as a "ponderous melodrama." The play, which was a story of the trials and tribulations of a race horse, included a horse race, a train-car race, and a full train wreck on stage. The horse race scene was singled out of all this to be the climactic scene of the play. Figure 37 shows a cut-away view of the stage with the scene in action. Note that in this case there were eight horses and riders, at least two of them running on treadmills which could be moved toward stage right.

The panorama, undoubtedly modeled after the device used in Ben-Hur, was composed of five separate moving canvases. As with the panorama in Ben-Hur, the downstage panoramas slightly overlapped the nearest ends of the upstage ones,

Figure 37

Horse Race Scene: *The Whip*, London (1913)

so that the audience received the impression of a single, semi-circular moving background.

The panoramas, which run in the opposite direction to the race, are extremely ingenious. The large panorama is fixed and occupies the back of the stage, and this is driven by a 35 horsepower motor in the cellar. The other four panoramas, however, which prevent a sharp line of demarkation, can be pushed around into position; and each of the four panoramas is actuated by its own motor. The five panoramas are all controlled through one switch board so that they are all moved in unison.109

It is interesting to note in Figure 37 that a winner's post appeared from under the stage floor at the conclusion of the race, just as the winning horse was supposed to move across the line. Whether this was effective or not very likely depended upon the degree to which the spectators were willing to go along with the whole illusion.

It should be clear that the nineteenth-century theatre found one of its greatest sources of spectacular entertainment in horse race scenes. When the thrill of racing horses was superseded by the thrill of racing automobiles, the theatres were quick to shift emphasis. In a play called Bedford's Hope in 1906, there was a race scene between a car and a train across a desert. Three panoramas were used in the background of the scene: a low one, a slightly higher one behind it, and a very large one in the rear. The

109Ibid., p. 102.
shortest panorama in the front moved very rapidly. The two behind it decreased in speed, the last panorama progressing quite slowly. This was an attempt to increase the moving perspective behind the car and train. There was also a moving ground cloth in front of the vehicles to simulate sand flashing by.110

There were other race-panorama plays throughout the late eighteen-hundreds and early nineteen-hundreds. Some featured horses, some vehicles, and some even concentrated on human beings, such as Belasco's 1881 production of The Octoroon in San Francisco. In that production Belasco had Jacob McCloskey chasing the Indian in front of a panorama which represented canebrake and swamps.111 But a listing of the devices, beyond what has already been presented, would be repetitious and unnecessary.

The salient feature of the race panoramas was exciting, fast-paced spectacle. Every possible attempt was made to cloak the spectacle in realistic illusion, since it was the mixture of the two which made nineteenth-century melodramas popular entertainments. In all of the race plays, the panorama itself was not a device of individual interest, as it


111Vardac, op. cit., p. 123.
had been in earlier years. The canvas moved too swiftly to require careful painting. It became, in these plays, an apparatus in the hands of the machinist, not the scenic artist.

VII. ASCENT-DESCENT, OR VERTICAL PANORAMAS

The panorama was normally operated in a horizontal or lateral movement. This was almost always true of the moving panoramic exhibitions, and theatres seldom found need to use panoramic scenery otherwise. There were some cases, however, such as novel pictorial effects or heavenly ascents, in which the panorama was worked vertically. A few examples will suffice to indicate this unusual employment.

In Charles Kean's production of Faust and Marguerite at the Princess's Theatre on April 19, 1854, a vertically moving panoramic device was apparently used in the final scene, when Marguerite dies and is carried to heaven by a chorus of angels. The scene, at her death, was backed by flats representing a church and side houses on a public square. There was also a set-piece fountain in front of the church. Figure 38 shows this scene. The flat church, houses, and fountain were on slotes. There was a trap in front of the fountain. After Marguerite had died, she was carried into
Figure 38

Final Scene: Faust and Marguerite,
Princess's Theatre (1854)

Reproduced from OSUTC Film 895, Scenes from Charles Kean Productions. Original in the Victoria and Albert Museum.
Figure 39

Panoramic Ascent: Faust and Marguerite,
Princess's Theatre (1854)

Reproduced from OSUTC Film 895, Scenes from Charles Kean Productions. Original in Victoria and Albert Museum.
the church by other characters, and Mephistopheles proceeded to take Faust to the regions below. The scene directions read:

The Fountain becomes a fountain of fire, Mephistopheles and Faust descend into it. The Church and Fountain sink, and discover Marguerite supported by Angels ascending to Heaven. Curtain slowly descends.  

This rapid transition was accomplished by dropping the trap in front of the fountain and shooting up flames from below. Faust and Mephistopheles disappeared quickly through the trap. The prompt notation for this action reads: "Pull below to take down trap. Send up fire and close up quick." Simultaneously the church, fountain, and houses disappeared below. The prompter wrote: "Pull below to sink Church and Fountain and Side Houses, and send up clouds . . . Pull above to work the cloth up."  

It was at this point that the panoramic action took place. A cloth with clouds painted upon it came up from below to become the back scene. As the cloth moved upward very slowly, Marguerite and four angels appeared suspended in front of it. The suspension of the actors had been achieved behind the church, before it dropped out of sight.

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112 Faust and Marguerite, OSUTO Film P. 170, p. 40.
113 Ibid.
114 Ibid.
Thus, when the church went down, the cloud cloth arose, and the angels and Marguerite were already suspended in front of it and rising with it. This effect is shown in Figure 39. The scene lasted for only a few moments and then the curtain descended.

The scene was panoramic in the sense that the vertically moving scenery helped give to actors in front of it an illusion of movement, and also helped effect a scenic transition. The cloud panorama was possibly painted on a series of flats which rose on a slot.

This particular variety of panoramic movement was not widely used, since its possibilities for interesting pictorial effect were greatly limited, and because the illusion of vertical movement for actors was usually accomplished with wires and various flying devices.

Another type of vertical panorama was used in Belasco's production of *The Girl of the Golden West* at the Belasco Theatre in New York on November 14, 1905.

When the play was about to begin, the house darkened gradually, the sun painted on the front drop and illuminated dioramically faded out, and the "curtain" rose silently and unseen as the lights were brought up on a panoramic view moving vertically across the proscenium opening in the fashion of a motion picture vertical panorama shot. The vertical sequence started where the front curtain stopped, at sundown, showing first the heights of
the mountains with the moon shining over them and the gleam of the light from the hut where the Girl lives, and thence "booming" downward.\textsuperscript{115}

This was, of course, a purely pictorial-transitional effect, not unlike that used by William Macready for his production of \textit{Henry V} in 1839. Its purpose was to set the scene in a pictorial manner. There are no indications that such a device was employed frequently. Indeed, the whole concept and practice of the vertical panorama, while interesting as a novelty, did not fall within the mainstream of panoramic usage and did not develop a scenic validity of its own.

\textbf{VIII. SUPPORTING THE PANORAMA CLOTH}

Throughout the preceding discussion of the various theatrical uses of the moving panorama, most points of technical interest have been clear in outlines: the use of revolving cylinders or the sliding of panoramic flats in grooves; the necessary coordination of the panorama with the other moving devices; the placement of the panorama at the rear of the stage; and the manual or electric operation of the rotating cylinders. Some of these points have not been presented in minute, mechanical detail, but then the details varied considerably from production to production, and their

\textsuperscript{115}Vardac, \textit{op. cit.}, p. 127.
features were determined more by the facilities of a given stage or the ingenuity of an individual machinist than by any set of widely recognized rules.

One point, however, deserves some further clarification, since, of all the technical aspects of panoramic staging, it is the point which would seem to have given the panoramists the most trouble. This has to do with the horizontal alignment of the cloth: how to keep it even and free from sagging as it progressed across the stage. It can well be imagined that the whole illusory effect of the moving panorama would be seriously damaged, if not lost altogether, if the painted cloth did not always present a smooth, level appearance. Careful rotation of the panoramic cylinders would have helped to gain the proper effect, but there was still the problem of supporting the cloth as it passed across twenty to thirty feet of space between the two cylinders, and the further problem of keeping the laps of cloth from slipping down as they wound off the dispensing cylinder or onto the receiving cylinder.

The prevention of sagging or slipping was not as simple as it might seem, for whatever means of movement were employed, they could not jar, jerk, flap, wrinkle, or in any manner disturb the smooth progress of the panorama cloth, else the effect would be ruined.
It has already been noted, in the presentation of Georges Moynet's discussion of the double sea storm panorama,116 that some kind of guide was required to support the panorama on its course. But Moynet's discussion concerned a rather special panorama, being doubled and curved, and it would be well to clarify the support of the cloth under more usual circumstances. Much of Moynet's material is applicable, of course, but even so it should be enlarged and clarified from other sources.

First, it was necessary to provide some track or guide for the cloth during its journey from cylinder to cylinder. Figure 31, from Moynet, has shown one method for meeting this necessity. The discussion of the Ben-Hur panorama has presented another method117 which was highly specialized and was specifically applicable to the continuous-belt panorama.

Figure 40 indicates the method by which Banvard's Mississippi River panorama was worked in 1848.

The mechanical devices employed are very simple but answer the purpose in a most admirable manner. The canvas is wound upon one large vertical roller while it is being unwound from the other,---This is done by bevel gearing A and B. As there is a great extent of canvas spread at once, which being painted is very heavy, it is very important to hold it up between the rollers and prevent it from what is technically termed sagging.118

Figure 40

Machinery for Banvard's Mississippi Panorama (1848)

The panorama cloth was attached to a rope which rode on the top of a row of double pulleys.

In Friedrich Kranich's *Bühnentechnik der Gegenwart*, a later method is presented. Figure 41 shows two devices for guiding the panoramic cloth. The device on the left is from the latter nineteenth century, while the device on the right is a twentieth-century form. Both devices include a framework along which the rope and the heavy canvas, to which the panorama is attached, can slide easily. The device on the right in Figure 41 is the more adequate of the two, since the two bolted pieces of wood would seem to offer less chance of the rope getting caught or jammed along the way. The panoramas under consideration here are straight panoramas, so the problem of a curved track, as described by Moynet, is not pertinent. It is assumed that in both devices shown in Figure 41, the cloth was either sewn or laced to the heavier canvas through which the guide rope passed. Both of these contrivances would well be given Moynet's term, patience, since threading the rope through the horizontal aperture must have been a considerable chore. The *Ben-Hur* device, on the other hand, was a more convenient arrangement, in which the panorama cloth was supported by little hangers which were attached above to small wheels or rollers. These rollers ran on a sturdy track above, which followed the
Figure 41

Upper Guides for the Panoramic Cloth

Reproduced from Friedrich Kranich, Bühnentechnik der Gegenwart (München and Berlin: Verlag Von R. Oldenbourg, 1929), I, p. 179.
course of the panorama. Such an arrangement would have made the cloth less difficult to pull along, but perhaps the chances of jamming were still as great.

Secondly, it was essential to prevent the cloth from sliding down on the cylinders. If the cloth did slide, it would create a sagging, uneven effect and occasion a hard, friction-making pull against the horizontal guide or track. Figure 30, on page 246, shows how this was prevented with the panorama discussed by Moynet. The guide rope passed around the cylinder at point B, at which point the cylinder was more narrow than the lower part, C, which received the cloth. This arrangement prevented the rope from slipping downward on the cylinder.

Two other methods are presented in Kranich's *Bühnentechnik der Gegenwart*. Figure 42 illustrates the two devices. Again, the one pictured on the left is a nineteenth-century device, and the one on the right is a more modern development. The operation of the older form is not presented clearly, but the method seems to have been as follows: the hanging clamps, here pictured pushed up and out of the way, were manually attached to the top of the canvas as it was wound onto the pillar. The angular braces

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Figure 42

Panorama Cylinders

then pushed against the clamps and held them firmly against the pillar. This may have been an awkward and difficult maneuver, but it would have prevented the cloth from slipping and it is the only apparent explanation for the device.

The device pictured on the right in Figure 42 clearly prevented the cloth from slipping down the cone-shaped cylinder by allowing the rope to wind upward in a spherical fashion, each wind of rope preventing the one above it from slipping downward. Figure 42 shows the rope and attached canvas strip already wound up on the cylinder. This cylinder, like the one illustrated in Figure 30, received only the top portion of the cloth.

Figure 43 presents another possible manner in which the movement could have been accomplished. The panorama pictured in Figure 43 was not a theatrical panorama. It was called a Mareorama, and was exhibited at the Paris Exposition of 1900. Two panoramas wound around a replica of a ship, which rocked gently, and the passengers were allowed to enjoy the illusion of a Mediterranean cruise.120 The heavy canvas was prevented from sagging or slipping as follows:

The cylinders are supported by floats, which permit them to move in a vertical direction a distance equal to the height of the truncated cone.

Figure 43

Mareorama, Paris Exposition (1900)

Reproduced from Scientific American, LXXXIII (1900), p. 193.
They are revolved by hydraulic motors situated at the very top of the construction. The upper edge of the canvas is reinforced with a thin band of steel, containing apertures at regular distances, which are adapted to engage hooks attached to horizontal iron rods, secured to the lower extremity of small trolleys, which are connected with each other and which run upon a rail. The housing of the trolley wheels are connected at the top by rods, so that when the mechanism is started one trolley wheel follows the other on the rail at a foreordained distance, thus carrying the canvas with it. Yokes are attached to the superstructure which carries the rail, and at the bottom of the yokes are rollers which are adapted to press the canvas into contact with the hooks secured to the trolley. The result is that a positive motion is imparted to the canvas without any danger of the canvas slipping or sagging. At the beginning it is unwound for the entire length of the vessel, and the steel band at the top is engaged with the first hook at the small base of the cone of the winding cylinder. When the latter is set in motion by the hydraulic motor, the band detaches itself from the nearest trolley hook, and the apertures with which it is provided present themselves opposite the hooks of the cone [see small inset diagram at the bottom of Figure 43] . . . . As the canvas winds by the ingenious mechanism, its weight causes the sinking of the float that carries the cylinder, and the hooks of the cone situated at different points present themselves in succession at the level of the point at which the steel band detaches itself from the hooks of the carriage of the trolleys.121

In essence this device compares to the one pictured on the right in Figure 42. The screw-shaped hook arrangement, however, provided a more certain safeguard against the canvas slipping than the mere coiling of the rope around the drum. It cannot be said, of course, that the highly elaborate

121 Ibid.
arrangement pictured in Figure 43 was ever used on a stage. But it does indicate a possible method for maintaining the horizontal alignment which may have been employed in a somewhat similar manner for panoramic scenery.

Figure 44 indicates the stage placement of the panorama cylinders in the Schwerin Theatre in Germany in the latter part of the century. In regard to their operation:

The two large wheels on either side of the gridiron floor are used for working the panorama. On the floor of the second gallery is placed the adjustment for fixing the top of the panorama drum. There are three of these drums, but there is provision for six on each side of the stage. Each drum revolves on an iron pin in an iron base socket. The drums on either side of the stage are connected by an iron batten on which the panorama travels.122

Figure 45 shows a transverse section of the same stage with three of the downstage cylinders in view. These illustrations give no indication of how the panorama cloth was guided across the stage, or how the cloth was attached to the cylinders. It is interesting to note, however, that there are provisions for six panoramas on each side of the stage. This would indicate that the panorama, in large, well-equipped theatres of this kind, was a regularly used staging device, capable of being employed at all scenic depths of the stage.

Figure 44

Panorama Cylinders, Schwerin Theatre, Germany (1882)

Figure 45

Panorama Cylinders, Schwerin Theatre, Germany (1882)

IX. SUMMARY

It has been the purpose of this chapter to describe the most important scenic uses of the moving panorama. It has been noted that panoramic scenery developed from the panoramic exhibitions. The motivation for this development was not theatrical necessity but public interest in the panorama as a pictorial and illusionistic entertainment. The theatre capitalized on the panorama's popularity by adapting it for theatrical purposes. Especially after the invention and introduction of dioramic effects into the panoramic displays the theatre began to use the panorama on a large scale.

The first scenic uses of the moving panorama were almost entirely pictorial, wherein the panorama was introduced into theatrical productions as an essentially non-dramatic novelty. It was the sheer spectacle of the moving picture which was most important. Pantomimes were the first theatrical entertainments to employ the panorama in this manner, later inserting the moving picture in such a way that it achieved some relationship to the simple pantomime plot.

The most obvious theatrical use of the moving panorama was for the purpose of staging scenic transitions. Scenic transitional panoramas, therefore, first in pantomimes and later in plays, became the first and most common employment
of the device. Playwrights began to turn out plays which were mere vehicles for the pictorial panoramic transitions. Other standard plays were often changed so that transitional panoramas could be more logically employed.

Some of the earliest panoramic transitions were employed in connection with sea and ship scenes, in which the actors and audience were supposed to travel from one locale to another as the panorama moved. In this manner the popular ship-storm-sea scene panoramas developed, in which the moving panoramic cloth or flats represented boat trips up quiet rivers or through horrendous storms at sea.

Another early transitional use of the panorama was with landscape scenes, which occasionally passed behind actors, horses, or land vehicles, creating the illusion that the actors, not the panorama, were in movement. As the nineteenth-century theatre became increasingly interested in thrilling spectacles, this type of panorama became one of the most important features of the horse race and train race melodramas.

By the end of the nineteenth century the panorama was no longer a theatrical novelty. Many of the plays of the period, which were largely plays of action and spectacle, found numerous ways in which the panorama could be integrated
into the scenic elements of the production. At the same time the panorama never lost its long-established capacity for producing effects of realistic illusion.

Panoramic scenery, as commonly used in the theatre, moved horizontally across the stage, either from one cylinder to another or on flats which were connected together and slid across the stage in grooves. Dioramic effects were a part of many panoramas, along with transparencies, cut-outs, and even practicable openings in the panoramic cloth. A less common use of the panorama was to arrange its movement vertically on the stage, to give illusions of ascent or descent, or simply to employ the device in a novel, pictorial manner.

By various methods, which differed in detail from theatre to theatre, the horizontal alignment of the moving panorama was stabilized so that the necessary evenness and smoothness of the moving cloth were maintained.
CHAPTER VI

THE END OF THE PANORAMA

I. INTRODUCTION

In the year 1899, a theatrical reviewer for Harper's Weekly described the manner in which a typical play was created during the last decade of the nineteenth century:

The literary features are bound to be secondary. The dialogue is the very last thing of which the playwright thinks. His first object is to arrange the plot in such a manner that the salient incidents of the story will be brought out in a series of effective stage pictures. Consequently the stage-manager is called into consultation very early in the proceedings. He it is who decides as to the practibility of this or that scene. He suggests a situation here and a tableau there, and the excision of this or that episode because it is likely to drag and the need of an additional scene in this or that act to make the thing balance.¹

Thus were the great realistic spectacles constructed. And yet it was in that same year, 1899, that Henrik Ibsen was nearing the end of a career which had already altered many concepts of dramatic effectiveness; the Théâtre Antoine had become a rallying point for young Parisian dramatists; and Thomas Alva Edison, along with other innovators, was experimenting with the first motion pictures. The Handwriting was slowly etching its irretrievable scrawl upon the wall. The

¹Shepard, op. cit., p. 1167.
days of the powerful stage-managers were fast drawing to a close, and with them would disappear all the ponderous clutter of their spectacular staging devices.

Not only was the emphasis in theatre shifting from melodramatic spectacle to plays of less ostentatious merit, but public tastes were changing. The public was tiring of spectacles, probably because the spectacles themselves had become absurd and ludicrous. Even the most unsophisticated spectators were no longer truly fooled. The chariot race scene in Ben-Hur, for example, may have filled the galleries because it was advertised as weighing forty tons, but fortunately it only lasted forty seconds. The ability of the stage to deceive the human eye could only go so far. After that the eye demanded a kind of realistic spectacle which the stage simply could not provide. In other words, the stage had out-spectacled itself to death at the end of the nineteenth century, and at the same time had created a public taste for spectacle that only the movies could satisfy.

In the face of the slow but sure demise of spectacles, theatre, as a form of art and entertainment, had only two ways to go: either into the cinema or into a kind of drama in which ideas outranked display. And, in the course of time, a division of theatrical talents, tastes, and techniques occurred in precisely that manner. The drama of spectacular
illusion and scenic magnificence was taken over by the cinema, where it could receive the kind of treatment to which it had grown accustomed. The drama of the legitimate theatre became more and more a drama of ideas—tragic, serious, comic, clever, or silly—but a drama in which the scenic elements were used to support the play rather than usurp it.

The painted, moving panorama, in the course of these developments at the close of the nineteenth century, soon became a theatrical stepchild. The movies used it for awhile but soon gave it up, for they had more convenient ways of achieving the same pictorial illusion. The legitimate stage did not want it, for the new breed of plays did not require it. And even if either the movies or the stage did occasionally need a moving background such as the panorama once supplied, they could now use photographic projections and did not have to bother with hundreds of feet of painted canvas, and cylinders, and tracks, and all the rest.

As moving panoramic scenery went, so went the exhibition hall panoramas. The huge, circular buildings, which once accommodated eager crowds of panorama spectators, were turned into skating rinks, riding stables, and bicycling academies. Some attempts were made to keep the exhibitions alive by adapting them to circular photographic
projections, such as that pictured in Figure 19, page 150, but even these did not encompass enough animation or diversity to hold the public.

William Telbin, the famous English scene painter, saw the art of the panorama slipping away in 1900. He was engaged to paint one of the last big, circular panoramas for the Paris Exposition, and he defended his position against those who claimed that the panorama was a "has-been":

We are constantly hearing that the taste of the public is constantly changing. Is that so? or is it that the masterpiece which encourages a taste is frequently followed by indifferent copies, or, rather, work constructed on the original idea? No doubt, had we the painters and the subject to do justice to it, the cyclorama and the moving diorama would again come into fashion, and form one of the items of attraction for London sightseers. That the taste for the panorama is not dead in France will assuredly be proved this year at the Paris Exposition.2

But the panorama was dead, or dying, in France as elsewhere. Although the cinema was not widely available in 1900, the public had become bored with the huge, lifeless paintings, despite whatever artistic skill may have gone into them. And, of course, when the motion picture became popular, it completely replaced the panorama as the great middle-class entertainment.

Some theatres attempted to supplant panoramic scenery with panoramic projections and still retain spectacular interest. A play called The Tornado, first produced in Chicago in 1892, had a tornado effect, which climaxed the piece and was described by its inventor:

As the wind blew, clouds of floating debris passed across the stage. These were painted upon thin muslim drawn across the stage rapidly, giving the effect of a real storm. I added to the effectiveness of this panorama by using for the first time a transparent disk, upon which was painted clouds and debris. This disk revolved quickly before a powerful lantern, which projected the image upon the stage, greatly adding to the effect of general chaos.3

But effective as this kind of device may have been, it could not be depended upon to satisfy public tastes once the cinema had demonstrated its ability to recreate the same spectacular scenes with almost total reality.

II. EFFECT ON CINEMA

The panorama was the forerunner of the cinema as far as public tastes were concerned. It would be difficult to establish so direct a relationship between the panorama and the cinema that the existence of the first could be pronounced the actual motivation for the invention of the latter.

The motion picture would very likely have been invented and popularized even if the panorama had never existed.

Still, it is undeniably true that the panorama created the kind of public appetite which would naturally prod inventive men to seek new ways to satisfy it.

The popularity of the panorama during the closing decades of the nineteenth century provides distinct evidence of the aesthetic taste for motion pictures. The influence of this form cannot be specifically measured. It can only be recorded that the first of the pictorial forms to disappear from the stage upon the arrival of the film was the panorama.\(^4\)

The early films bore a similarity to the early panoramas in subject matter and treatment. The films were topical and pictorial, with little or no attempt toward dramatic action. The public was charmed by the novelty, the illusion of reality, and the purely pictorial representations. The early growth and development of the films, in fact, closely duplicate the emergence of the panoramas. First, there was a pre-conditioned public taste for representations of nature and realistic illusions. Second, there was the ever-present interest in pictorial novelties. Third, there was a period of early development in which the pictorial representations over-rode any dramatic possibilities inherent in the device. Fourth, there was a slow but steady increase

in integrated dramatic employment. Fifth, and finally, there was a long period in which the full, spectacular potentialities of the form were put to use and refined in a number of ways. It is interesting to note that television has progressed through somewhat the same stages of development, and has also superseded and created a change in movies in much the same manner as the movies overwhelmed the panorama.

One type of film closely duplicates the nineteenth-century panorama even today. That is the travelogue film, which like the old Mississippi panoramas, offers a mixture of entertainment, pictorial beauty, and geographical instruction. And when a modern travelogue film centers its attention on the Holy Land, as many of them do, the relationship of the film to the panorama is startling. Even the gaudy technicolor photography of such films reminds one of the colorful dioramic effects used in almost all panoramas. How often have religious groups watched a movie showing lovely, colorful representations of the Church of the Holy Sepulchre in Jerusalem!

A final comparison between the effect of the panorama and the effect of the film must not be omitted. It will be recalled that the nineteenth-century panoramic exhibitions were particularly appealing to people who found the theatre morally offensive. The panoramists, as a matter of fact,
capitalized upon this public distrust of theatrical entertainments in their advertising. The panorama was for "the whole family." It can hardly be argued that modern motion pictures are free of offensive subject matter or scenes, but the American film producers have, by and large, created a public trust in their products by establishing their own code of film morality. Parents often feel that their children are more safe at the movies than at the theatre. At least the language is likely to be less colorful, and the whole effect, perhaps, less thought-provoking. Much of the moralistic prejudice against the theatre has now disappeared, of course, but there are still many people who feel that they can always find a good, clean movie, while it would be impossible to find a good, clean play. In the nineteenth century, the panoramic exhibitions occupied this same virtuous position in the public mind.

In appropriating melodramatic spectacle from the nineteenth-century theatre, the films also adopted some of the theatre's technical devices to their own requirements. The moving panoramic concept has come to be employed in two ways: first, the "pan-shot," in which the camera swings in a horizontal or vertical arc over a vast expanse of scenery; and second, the moving background device, in which actors, often in some kind of vehicle, appear in front of a projected moving scene. This first use, the "pan-shot," compares to
the pictorial or scenic transition panorama, while the projected, moving background device compares to the endless-belt panoramas of the horse race spectacles. The stage panorama is all but extinct, but the concept and technique of the panorama continues to add pictorial interest and background excitement to the films.

III. THE CYCLORAMA

The last theatrical vestige of the once popular panorama resides in the contemporary cyclorama, variously called cyclorama cloth, dome, or horizon. But it is only a vestige and not a very direct one at that.

The concept of the cyclorama horizon appears to have had its own line of development. It cannot, with accuracy, be termed an outgrowth of the panorama, although the two have certain technical similarities and have been used occasionally to produce the same effect.

The cyclorama is not so much a scenic device as it is a whole concept of theatrical staging. Its full development did not come along with the scene painter or machinist, but with the perfection of electrical stage lighting and the trend toward "stage reform" in the latter years of the nineteenth century. Its main historical precedents are not the same as
those attributed to the panorama. The earliest cycloramic concepts came from the Italians' perspective stage settings of the sixteenth and seventeenth centuries.

The skies above were often represented by domed ceilings, painted blue with little clouds floating about—these domed ceilings were certainly the forerunners of the Fortuny Panorama of today.\(^5\)

The allusion to the Fortuny Panorama in this quotation refers, of course, to the sky-dome cyclorama invented by Mariano Fortuny in the early part of the twentieth century, and which he used to demonstrate his theory that reflected light was better than direct light upon the stage.\(^6\)

The Italians occasionally used another staging method which was primarily cycloramic in concept. Figure 46 illustrates this concept. It is a Banquet Scene in the ballet, *Il Dono Del Re Dell'Alpi*, presented at Turin in 1645. Note the manner in which the scene was composed of three walls, which tended to wrap around the stage space on three sides. There were also set-pieces, and perhaps the house on stage-right was a flat piece, jutting out like a side wing. But the three-wall surface was painted all around to resemble a horizon and landscape. The general effect, while not

\(^5\)Edward Carrick, "Theatre Machines in Italy, Architectural Review" (July, 1931), p. 11.

\(^6\)The Oxford Companion to the Theatre, op. cit., p. 470.
Figure 46

Banquet Scene from *Il Dono Del Re Dell'Alpi*
Turin Ballet (1645)

cycloramic by present-day standards, nonetheless shows that even as far back as the seventeenth century stage designers had attempted to give more expansive depth to the scene by discarding the usual row of perspective side wings and the backscene.

The term cyclorama was not invented until the middle of the nineteenth century, when it was used in reference to a moving panoramic exhibition in London in 1848. The exhibit was unquestionably a panorama, and the term cyclorama was merely a publicity device to interest the public. The meaning of the two words was much the same, and throughout the latter part of the century they were employed rather indiscriminately in reference to panoramic exhibitions, both moving and stationary. The term panorama, however, was always the more popular of the two.

The first known employment of the cycloramic concept in the theatre occurred in a ballet, Le Corsaire, when it was presented at Her Majesty's Theatre in London in July, 1856. The word "Cyclorama" was apparently not used, but the concept and effect were definitely cycloramic:

The complete withdrawal of what are technically called the wings, and the substitution of a
broad expanse of panoramic atmosphere, extending over the whole area of the stage, is a new, bold, and successful idea.

Figure 47 shows the scene in which this "panoramic atmosphere" was employed. It was a familiar moving panoramic ship-wreck scene, with a gathering storm horizon in the background. The important difference was that the panorama wrapped around the stage on all three sides. And this was not merely a novel use of the panoramic device. It was an attempt to do away with the side wings, borders, and other peripheral scenery so that the center of scenic interest could be shifted from the sides to the center of the stage, or, for that matter, to any portion of the stage desired. The device was quite rightly called a "panoramic atmosphere" rather than a panorama, for the moving panorama was regularly employed with side wings and borders. Even the three-sided horse race panoramas, such as the one employed in Ben-Hur, were purely spectacular devices and were not intended to give atmospheric breadth and depth to the stage. This is to say that the earliest cycloramic experiments used panoramic techniques and materials, but the purpose was not, like the panoramas, to provide a moving, pictorial background for the scene, but rather to relieve the stage of the scenic constrictions imposed upon it by the side wings and borders.

Figure 47

Panoramic Atmosphere: *Le Corsaire*, London (1856)

In 1862 a Parisian optician, named Foucault, experimented with a cyclorama. He used a huge canvas at the back and sides of the stage, upon which was painted a view of the sky. The ends of it were not perceptible in any direction, either from the side boxes or the orchestra. One of his scenes, representing the Sahara Desert, showed a wide expanse of sand and horizon with a few palm trees in the center.9

Edwin O. Sachs claims that the cyclorama is essentially German in its origin, but gives no historical reference.10 Certainly the Germans, with their interest in stage reform around the turn of the century, were the foremost employers of cycloramic horizons. Sachs writes:

Unlike the panorama of the English stage, the German type is made to mask in the whole of the two sides and back, while the English example . . . is simply a straight back cloth moving off a roller on one side to a roller on the other. The German "panorama," when it is made moveable, runs on a lathe at the top. The chief difficulty in working this panorama is, of course, at the curved part. In the later development of German scenic machinery, we shall find that this piece of scenery plays a most important part, especially in the hydraulic stage of the "Asphaleia" system. . . . I must only say that the "panorama" of the German stage cannot be looked upon as an exact substitute for the moving "scene" we are familiar with in this country [England]. It was created as a fixed scene in fact, a back cloth continued down the sides, and its chief

9"Scene Painting," Builder, XX (July 5, 1862), p. 476.

object was to do away with the difficulty felt in making a good scenic picture with the parallel lines of wings, borders, and back cloth, and the unsightly joints which this primitive system always exhibited.\textsuperscript{11}

The cyclorama horizon of the Asphaleia system stage, pictured in Figure 48, was 17 meters in height. The bottom of the cloth was 2 meters above the floor, permitting actors and crew to pass under it. In Figure 48 the cloth appears to be resting on the floor, which was not its usual position. The total length of the cloth was 150 meters and the two rollers were 24 meters apart. A winch in the fly gallery connected to the top of each roller.\textsuperscript{12} Sachs writes:

Of course the "horizon" can be wound up entirely on either of the rollers, and this is done when the back stage is used, but, as a rule, the "horizon" in an "Asphaleia" stage is considered a semi-fixture, and it is a somewhat cumbersome appliance to handle.\textsuperscript{13}

The first American use of the cycloramic horizon was at The Chicago Auditorium, constructed in 1890. A descriptive brochure for the opening of the magnificent new theatre stated:

\begin{quote}
[The stage includes] ... a device never before used in this country, termed a horizon. It consists of an endless canvas, carried on a track, which returns on itself in the shape of a U. This
\end{quote}

\textsuperscript{11}\textit{Ibid.}, p. 595.
\textsuperscript{13}\textit{Ibid.}
Figure 48

Model of Asphaleia System Stage

canvas forms a background for all open air settings, and is painted to represent different conditions of the atmosphere. The effect of this canvas is that of illimitable space. It can be raised or lowered at will by means of a lever and hydraulic engine, and can, therefore, be raised entirely out of the way when not required by the setting. It should be stated that the canvas is carried on this endless track by a series of rollers, and can be moved readily by means of a crank, so as to bring any desired condition of the sky in the background.\footnote{The Auditorium, Chicago (Chicago: Exhibit Publishing Co., 1890), OSUTC Film 784, p. 135.}

The introduction and perfection of electrical projections, of course, controverted both the necessity of painting the canvas and of winding it between rollers.

The final and most extravagant development of the cyclorama horizon arrived with Mariano Fortuny's concept of a curved dome. The dome was to form a shell arrangement over the top of and around the sides of the stage, and was to have a slightly porous, rough surface, similar to the surface of cement. The lights were to be projected onto bands of colored silk, which reflected the rays onto the dome and then back down toward the stage. The concept was that stage illumination by reflected light was more natural and more beautiful than by direct light.\footnote{The Oxford Companion to the Theatre, op. cit., p. 470.} Figure 49 shows this kind of arrangement at the Dresden Shauspielhaus in Germany. Fortuny's dome scheme has been adapted to numerous stages,
Figure 49

Horizon Dome: Cross Section, Dresden Schauspielhaus

although his concept of entirely reflected light has usually been discarded because of the extravagant electric current required.

The cyclorama, with cloth or dome, is a present-day heir of the panorama, but not an heir in pure-blooded, direct descent. From the panorama the cyclorama horizon inherited a number of important technical ingredients, such as methods of hanging and support, means of attaching and stretching the cloth, and control of its lateral or vertical movement on the stage. But there the relationship ends. For the cyclorama horizon, even when used for projections, is primarily a device for encircling the stage with a neutral, non-pictorial background, thereby eliminating the need for masking side wings and borders.

IV. SUMMARY

Throughout the nineteenth century, the panoramic exhibitions provided a major entertainment outlet for the pictorially conscious public in America, England, and continental Europe. During the latter part of the century, panoramic scenery became one of the most popular staging devices associated with spectacular drama. But shortly before the beginning of the twentieth century, both the panoramic exhibitions and panoramic scenery began a period of steady decline
in use and popularity, which eventually led to their virtual extinction. The end of the panorama occurred through a number of successive developments:

(1) As a useful staging device, the panorama was almost entirely associated with melodramatic spectacles. It was a tool of the stage-manager, not the playwright, and was widely used during the latter part of the nineteenth century only because the theatre was almost exclusively devoted to spectacular staging.

(2) As for the exhibition hall panoramas, the public became increasingly bored with their lack of animation and variety. The novelty of the exhibitions had worn off and the public taste had been prepared for more exciting entertainments.

(3) Both the theatre and the panoramic exhibitions finally arrived at a point where neither of them could satisfy the great public interest in pictorial spectacle, which, ironically enough, the panoramic spectacles had helped to establish in the first place.

(4) The introduction of the cinema at the turn of the century enabled the public to obtain the kind of animated, pictorial entertainment which the theatres and panoramic exhibitions could no longer supply. The cinema became the employer and promoter of panoramic techniques and tastes.
The stage, turning to less spectacular pursuits, found increasingly less use for the panorama until it disappeared almost entirely.

(5) The stage reform movement championed the cycloramic concept of staging toward the end of the nineteenth century. Certain technical aspects of the cycloramic horizon are developments from the moving panorama, although the idea for cycloramic staging was not motivated by the panorama. The last theatrical vestige of the once famous moving panorama is to be found in the cycloramic horizon cloths of the modern stage.
CHAPTER VII

CONCLUSIONS

Panoramic scenery has been largely overlooked as an important factor in the establishment of entertainment tastes during the last century. It has seldom been mentioned as a possible reason for the nineteenth-century theatre's emphasis upon spectacle, pictorial illusion, and picturesque representations of nature. Far too often it has been considered as a mere novelty device, or as a single staging device of purely background interest.

This study has attempted to bring forth the proposition that panoramic scenery was a great deal more than that. The panorama was, in a very real sense, the outstanding example of theatrical tastes and theatrical concepts during the nineteenth century, for it consistently included all those features which are generally associated with staging practices during that era: pictorial splendor, melodramatic spectacle, realistic illusions, scenic display, and theatrical excitement. It would be difficult to find another single theatrical device or element which more clearly signifies the idea of theatre in the nineteenth century.
The whole glamorous history of the panoramic and dioramic exhibitions has also been largely ignored in studies which have tried to ascertain the public outlook on entertainment during the last century. This study has not attempted to write the full history of panoramic exhibitions—a history which definitely should be written—but it has endeavored to establish the fact that the theatres, and later the cinema, capitalized on the existence of a public fascination with visual spectacle which had already been established by the panoramic exhibitions. It is, as a matter of fact, difficult to consider the panoramic exhibitions as being anything less than theatrical spectacles, in spite of their non-theatrical orientation.

The exhibition hall panoramas and dioramas were, after all, more popular than the theatre as a public entertainment during most of the nineteenth century. People who found the theatre offensive or uninteresting attended the panoramic exhibitions in large numbers. It is understandable that the theatres would make every possible attempt to duplicate the pictorial appeal of the panoramas under these conditions, for financial reasons if for no other. Nineteenth-century theatrical tastes and practices were acutely and continuously influenced by the panoramic exhibitions.
The panorama wielded considerable influence in the art of scene painting during the century. Many panoramic artists also worked in the theatres, and since the panoramas were entirely concerned with painting and pictorial illusions, it is reasonable to believe that the panorama painters brought new concepts and techniques into the theatres, rather than the other way around. There is need for a detailed study of the methods of panoramic and dioramic painting during the nineteenth century. Such a study would surely shed light upon the theatrical scene-painting practices of the same era.

Above all, panoramic scenery was one of the most important causative factors in the eventual development of the cinema. A. Nicholas Vardac has treated this aspect of panoramic influence rather thoroughly in his book, Stage to Screen. The present study, however, has amplified the relationship between the panorama and the cinema. Throughout the whole of the nineteenth century, and increasing significantly as the century wore on, entertainment tastes were on the level of visual or pictorial excitement. The panoramic exhibitions and the theatre, relying heavily upon the moving panorama, had developed and magnified these tastes as far as they were able. The cinema was the logical extension of these interests when the exhibitions and theatres finally
reached certain physical and mechanical limitations beyond which they could not go. That which makes the cinema so popular today was the very thing which made the panorama popular in the nineteenth century—melodramatic action against an animated, pictorial background.

Moviegoers today, particularly the youthful set, may look back upon the early history of motion pictures and wonder how the spectators were then able to find silent films at all entertaining. The answer is that they found the earliest silent films interesting to watch—simply for the pictorial movement. They were intrigued with the device itself and, of course, with its ability to present an illusion of reality. For a full century before, the panoramas had given much the same kind of delight.

It is the general conclusion of this study, therefore, that the panorama in all of its forms exemplified the pictorial and theatrical tastes of the nineteenth-century public and was one of the most important causative factors in the popularity of illusionistic, spectacular staging in the nineteenth-century theatre.
BIBLIOGRAPHY

A. BOOKS


Grant, Colonel Maurice Harold, *A Chronological History of the Old English Landscape Painters (In Oil) from the XVIth Century to the XIXth Century.* Vol. 1. London: Published by the Author and Printed by Messrs. Hudson and Kearns, Ltd., n.d.


B. PERIODICALS


"Banvard's Panorama," Scientific American, IV, No. 13 (December 16, 1848), 100.


Coffin, H. L. "Diorama, Panoramas, Cycloramas," Mentor, XVI (June, 1928), 32-35.


"Dans le Palais des Chemins de Fer; Le Diorama," L'Illustration, CXC VIII (November 13, 1937), 311-312.

"Device for Producing Stage Illusion," Popular Mechanics, XX (1913), 693.


"Dioramic Panorama at the Paris Exposition," Scientific American Supplement, XLIX (January 6, 1900), 200ff.


"Electricity Behind the Stage," Scientific American Supplement, XXIX, No. 748 (May 3, 1890), 11954-11955.

Ellsworth, W. W. "Behind the Scenes at Ben-Hur," The Critic, (March, 1900), 245.

The Examiner, (January 11, 1830), 29.


Gentleman's Magazine, n.s. XXII (1829), 156.

"Harlequin Amulet; or The Magic of Mona," European Magazine, XXXIX (January, 1801), 41.

Heilbron, B. L. "Making a Motion Picture in 1848: Henry Lewis on the Upper Mississippi, text of his journal," Minnesota History, XVII (June-December, 1936), 131-158, 288-301, 421-436.


"How Stage Sounds and Storms are Made," Popular Mechanics, X (August, 1908), 522-523.

Illustrated London News, XXXIV (January 1, 1859), 11.


"Moving (Dioramic) Experiences," *All the Year Round*, XVII (March 22, 1867), 304-307.


"Le Panorama Le Vengeur et ses Installations Mecaniques," *La Nature*, XX, No. 1000 (July 20, 1892), 129.


"Panoramas and Dioramas," *Leisure Hour*, XXXV (1852-1886), 45.


"Scene Painting," *Builder*, XX (July 5, 1862), 476.


"Stage Effects in Ben-Hur," *Werner's Magazine*, XXVI (October, 1900), 161-164, and (December, 1900), 311-327.

"Stage Storms," *All the Year Round*, n.s. VIII (August 10, 1872), 304-308.


"The Three Mile Picture," *Hobbies*, XLIX (December, 1944), 11.


C. PLAYSCRIPTS

Dibdin, Charles. The Touchstone. Larpent Ms, 1778. OSUTC Film 215.

Greenwood, T. L. Harlequin and the World Turned Upside Down; or Number Nip and the Enchanted Fountain. Sadler's Wells Pantomime, December 26, 1848. OSUTC Film 1462A*.

Harlequin and Cock Robin; or Vulcan and Venus. London: Published by John Miller, 1829. Covent Garden Pantomime, December 28, 1829. OSUTC Film 492.

Harlequin and the Dragon of Wantly; or More of More Hall. London: Printed for John Miller, Bridge Street, Blackfriars, 1824. Covent Garden Pantomime, December 27, 1824. OSUTC Film 275.


Harlequin and Little Thumb; or The Seven-League Boots. London: Printed by J. Tadby, 1831. Drury Lane Pantomime, December 26, 1831. OSUTC Film 270.

Hop o' My Thumb. Covent Garden Pantomime, December 26, 1831. OSUTC Film 87.

Jack in the Box; or Harlequin and the Princess of the Hidden Island. London: Published by W. Kenneth at his Dramatic Repository, Covent Garden, 1829. Drury Lane Pantomime, December 26, 1829. OSUTC Film 493.


Moncrieff, W. T. Zoraster; or Spirit of the Star. London: Printed and Published by J. Limbird, 143, Strand, 1824. OSUTC Film

Puss in Boots; or Harlequin and the Miller's Son. London: Published by W. Kenneth, 1832. Covent Garden Pantomime, December 26, 1832. OSUTC Film 118.
D. PROMPT BOOKS


Greenwood, T. L. Old Izaak Walton; or Tom Moore of Fleet Street. Sadler's Wells Pantomime, 1858. OSUTC Film 1462B*.

Harlequin and a Happy New Year; or The White Cat and the King and his Three Sons. Sadler's Wells Pantomime, 1846. OSUTC Film 1462A*.


Shakespeare, William. Pericles, Prince of Tyre. Sadler's Wells Production, October 14, 1854. OSUTC Film P. 1039.


——. The Tempest. n.d. OSUTC Film P. 1058. Presumed to be a prompter's copy of OSUTC Film P. 31, Sadler's Wells, 1847.
The Tempest. Signed "William Creswick." OSUTC Film P. 1064. Presumed to be a prompter's copy of OSUTC Film P. 1058 or P. 31, Sadler's Wells, 1847.

The Tempest. n.d. OSUTC Film P. 1070. Presumed to be a prompter's copy of OSUTC Film P. 1064, P. 1058, or P. 31, Sadler's Wells, 1847.


Timon of Athens. Sadler's Wells Production, September 15, 1851 or October 11, 1856. OSUTC Film P. 1056.

E. THESES AND DISSERTATIONS


F. PROGRAMS AND PLAYBILLS

Barker's Panorama Building, Leicester Square, 1815. "Explanation of the View of the City of Paris, now exhibiting in Barker's Panorama, Strand; Taken from the Tuileries." OSUTC Film 1468.

Barker's Panorama Building, Leicester Square, 1816. Henry Aston Barker's Battle of Waterloo Panorama. OSUTC Film 1468.

Belgian Panorama Company, 1882. Program for the panorama of The Siege of Paris in 1871 by Philippoteaux. OSUTC Film 1468.
Chinese Rooms, Broadway, New York, 1855. "Descriptive Book of The Tour of Europe, the largest Moving Panorama in the world." New York: Pettiner and Gray, Printers, 10 Spruce Street, 1855. OSUTC Film 1468.


Drury Lane, London, December 26, 1831 and March 29, 1832. "New and Splendid Diorama designed and painted by Mr. Stanfield from sketches taken on the spot during his last continental tour." OSUTC Film 1468.


Sadler's Wells, London, 1796. Variety Entertainment Program referring to a "progressive scenic picture." OSUTC Film 1448*.

April 7, 1847. The Tempest. Playbill. OSUTC Film 1462B*.

December 26 and 27, 1848. Harlequin and the World Turned Upside Down; or Number Nip and the Enchanted Fountain. OSUTC Film 1462B*.

December 26, 1846, and December 28, 1846. Harlequin and a Happy New Year!; or The White Cat and The King and His Three Sons. OSUTC Film 1462B*.

December 26, 1855. Harlequin and Puss in Boots; or the Ogre of Rat Castle and All the World and his Wife. OSUTC Film 1462C*.

December 27, 1858. Harlequin and Old Izaak Walton; or Tom Moore of Fleet Street, The Silver Trout, and The Seven Sisters of Tottenham. OSUTC Film 1462C*.
December 26, 1860. Sinbad the Sailor; or The Fairy of the Diamond Valley, and the Little Old Man of the Sea. OSUTC Film 1462C.

December 26, 1861. Cherry and Fair-Star; or Harlequin and the Singing Apple, the Talking Bird, and Dancing Waters. OSUTC Film 1462C.


Theatre of Arts, 1817. Panoramic entertainment. OSUTC Film 1468.


Theatre Swansea, 1824. Program including "Eidophusicon, or Moving Diorama." OSUTC Film 1468.


G. MISCELLANEOUS

Arrowsmith, John [pseud. for Louis Daguerre and Henri Bouton]. "An Improved Mode of Publicly Exhibiting Pictures or Painted Scenery of every Description, and of Distributing or Directing the Day-light upon or through them, so as to Produce many Beautiful Effects of Light and Shade, which I denominate a 'Diorama.'" Patents for Invention. English Patent No. 4899, March 6, 1824.

The Auditorium, Chicago: Exhibit Publishing Co., 1890. OSUTC Film 784.

Barker, Robert. "An entire New Contrivance or Apparatus, which I call La Nature a Coup d'Oeil, for the Purpose of Displaying Views of Nature at large by Oil Painting, Fresco, Water Colours, Crayons, or any other Mode of Painting or Drawing." English Patent No. 1612, July 3, 1787.
Colosseum, Exterior of the Colosseum, Regent's Park, London, 1829. OSUTC Film 1443*.

Diorama Exhibition Hall, Lothian Road, London, c. 1840. OSUTC Film 1443*, "London Theatre Iconography."


"Holworth's Wonders of the World." Unlabeled clipping, May 11, 1852, Mechanic's Hall, Boston. OSUTC Film 1468.


Princess's Theatre, London. Advertisement. For week of March 17, 1856. OSUTC Film 158*.


The Tempest. Sadler's Wells, April 7, 1847. Unlabeled clipping. OSUTC Film 1462B*.

Trafalgar Panorama, Misc. Toy Theatre Prints. OSUTC Film 1461B*. 
APPENDIXES
APPENDIX A

The following is a chronological listing of the most important panoramas painted and exhibited by Mr. Robert Barker and his son, Henry Aston Barker. Panorama subjects are underlined.


London, at 28, Castle Street, Leicester Square, 1792.

Spithead, at Leicester Square (where all subsequent panoramas were exhibited), 1794.

Lord Howe's Victory, 1794.

Bath, 1795.

Windsor, 1798.

Bridport's Victory; and Margate, 1798.

Plymouth, Cornwallis' Retreat, Dover, and Battle of the Nile, 1799.

Ramsgate, 1800.

Constantinople, 1801.

Copenhagen, 1802.

Paris, 1803.

Gibraltar, 1804.

Trafalgar, 1806.
Edinburgh, 1806.
Bay of Dublin, 1807.
Weymouth, 1807.
Grand Cairo, and Flushing, 1810.
Brighton, Malta, 1810.
Messina, 1811.
Lisbon, 1812.
Harbour of Malta, 1813.
Badajos, 1813.
Vittoria, 1814.
Elba, 1815.
Battle of Paris, 1815.
Waterloo, 1816.
St. Petersburg, 1817.
Algiers, 1818.
Spitzbergen, 1819.
Lausanne, 1819.
Naples, 1820.
Berne, 1821.
Corfu, 1822.
Rome, Athens, 1822.
Coronation of King George IV, 1822.
APPENDIX B

PAINTING AND ILLUMINATING THE DIORAMA


The principles of this new art have been most admired, or perhaps rather most fully developed, in the following pictures:—The Midnight Mass—Land-slip in the Valley of Goldau—The Temple of Solomon— and The Cathedral of Sainte Marie de Montreal. Each of these paintings has been exhibited with the alternate effects of night and day gradually stealing over them. To these effects of light were added others, arising from the decomposition of form, by means of which, as for example, in The Midnight Mass, figures appeared where the spectators had just beheld seats, altars, &c.; or, again, as in The Valley of Goldau, in which rocks tumbling from the mountains replaced the prospect of a smiling valley.

1. Pictorial Processes

The canvas is painted on both sides. In this case, therefore, whether the subjects be illuminated by reflected or refracted light, one indispensable essential is, to employ a medium or canvas which is exceedingly transparent, and the
texture of which is as equal as possibly can be obtained. Either lawn or calico may be used. It is also necessary to choose those stuffs of the greatest width that is manufactured, to avoid seams, which are always difficult to conceal, especially in the principal lights of a picture.

When the canvas thus selected is stretched, it is necessary to prime it, on both sides, with at least two coats of parchment size.

**First Effect**

The first effect, which ought to be the clearer of the two, is executed on the right side of the canvas. The sketch is first made in black-lead, taking care not to sully the canvas, the whiteness of which is the sole resource possessed by the artist for bringing out the lights of the picture; for white cannot be used in the first effect. The colours which I use are ground in oil, but laid upon the canvas with turpentine, to which sometimes I add a little animal oil, but only for deep shadows, and these latter may be varnished without injury. The manipulation is exactly the same as in water-colour painting, with this difference only, that the colours are prepared with oil instead of gum, and applied with turpentine instead of water. It will readily occur to the artist that he can employ neither white nor any opaque
colour whatsoever by coats, which in the second effect would occasion spots more or less tinted, according to the greater or less degree of opacity. It must be the endeavor of the artist to bring out effects at a stroke— at once; going over the effect injures the transparency of the canvas.

**Second Effect**

The second effect is painted on the wrong side of the canvas. The artist in executing this part of his work must employ no other light than that which comes from the front of the picture through the canvas. By this means the transparent forms of the first effect are seen; these forms must either be preserved, or painted over, according to the effect intended.

First of all, a wash of some transparent blue is put over the whole canvas. This coating, like the other colours, is prepared in oil, and laid on in essence of turpentine. The marks of the brush are effaced by a huge tool of badger's skin. By means of this coating the seams are also concealed to a certain extent, by taking care to lay it on thin along the selvedges, which have always less transparency than the rest of the canvas. When this coating is dry, the alterations intended to be made on the first effect, are sketched out.
In executing the second effect, the artist has nothing to do beyond modeling in light and shadow, without reference to local colour or to the colours of the first picture, which are seen by transmitted light as transparencies. This part is executed by means of a tint of which white is the base, with which lampblack is mixed in order to obtain a grey, the strength of which is ascertained by applying it to the wash of blue on the wrong side, and then viewing it from the right side of the picture, from which position it will not be at all perceptible if of the proper strength. The gradation of tones is produced by the greater or less opacity in this tint. It may happen that the shadows of the first effect interfere with the execution of the second. To remedy this inconvenience, and to conceal these shadows, we can harmonize their force, by using a gray of a corresponding opacity according to the strength of the shadows which it is the intention to destroy.

It will occur to the artist, that it is necessary to urge this second effect to its utmost power.

When this general effect of light and shadow is finished on these principles, and the desired effect obtained, the picture may be coloured, the artist using only the most transparent tints prepared in oil. It is still a water colour that is to be executed; but less turpentine must be used in
these glazings, which produced a powerful effect only in proportion as they are repeated several times, and with more of oil than essence. However, for slight effects of colour, turpentine is sufficient.

The Eclairage or Lighting up the Pictures

The first effect on the right or front of the canvas is lighted by reflection, that is to say, only by a light which comes from the front, while the second effect—that painted on the wrong side receives its light by refraction; that is, from behind only. In both effects we may employ both lights at once, in order to modify certain portions of the picture.

The light which gives effect to the painting in front should come from above. The illumination which falls upon the second effect—that painted behind, should come from vertical openings, it being always understood that these are to be completely closed when the first effect only is to be seen.

If it happens to be necessary to modify a part in the first effect or picture by a light belonging to the second, that is, coming from behind, then this light must be enclosed so as not to fall except on the proper place. The windows or openings ought to be distant from the paintings at least two
metres, in order to give a power of modifying the light by transmitting it through coloured media, as the exigencies of desired effects may demand. The same means are requisite for the first effect or front picture.

It is admitted that the colours which appear on objects generally are produced only by the arrangement of the molecules of these objects. Consequently, all those substances used in painting are colourless: they only possess the power of reflecting such or such a ray of light which in itself contains all the colours. The more pure these substances are, the more decidedly do they reflect the simple colours, never, however by an absolute or independent property, which by the way, it is not necessary that they should do in order to represent the effects of nature.

To explain then the principles upon which Dioramic paintings are executed and lighted up, take as an example the effect produced when light is decomposed; that is to say, when a portion of its component rays is intercepted.

Put upon a canvas two colours—the brightest possible—the one red, the other green, both as near as may be of the same intensity. Now, interpose a red medium, as a coloured glass, in the stream of light which falls upon them—what happens? The red colour reflects the rays which belong to it; the green remains black. Reverse the experiment by interposing
a green glass—the effect also is reversed; the green colour gives forth its proper reflection; the red is now black. The effects, indeed, are not perfect unless the interposed media completely exclude all rays but their own, a condition not easily obtained, for coloured media have rarely the power of excluding all but one ray. The general effect, however, is sufficiently determined.

To apply this principle to dioramic paintings, though in these paintings there are only two effects represented, one of day in front, one of night behind. These effects not passing the one unto the other without a complicated combination of the media which the light had to traverse, produced an infinity of other effects similar to those which nature presents in her transitions from morning to night, and the reverse. It must not be imagined that it is necessary to employ media of very intense hues in order to obtain striking modifications of colour, for often a slight shade in the medium suffices to operate a very great change in the effect.

It will be understood from these principles of dioramic art in which striking results are obtained by a single decomposition of light, how important it is to observe the aspect of the sky when we would appreciate the tone of a picture, whose colouring matters are thus subject to decompositions so great. The best light for this purpose is that from a
pale sky; for where the sky is blue, it is the blue tone of
the picture also, and consequently its cold tone which comes
out most powerfully, while its warm tones remain inactive.
Their media are not present, and they are cast comparatively
back into neutral tints by the blue medium of the sky—so
favourable to the cold tones of the picture. It happens, on
the contrary, when the sky is coloured, that the warm tones
of the picture—its reds and yellows—come forth too vigor-
ously, and, overpowering its colder tones, injure its har-
mony, or, it may be, give it quite a different character—a
warm instead of a cold tone of colour.

It is easy to understand from these observations that
the uniform intensity of colours cannot be maintained from
morning to evening. We may even venture to assert it to be
physically demonstrated that a picture cannot be the same at
all hours of the day. This, perhaps, is one of the causes
which contribute to render good painting so difficult to
execute, and so difficult to appreciate. Painters, led into
error by the changes which take place between morning and
evening in the appearance of their pictures, falsely attribute
these alterations to a variation in their manner of seeing,
and colour falsely, while, in reality, the change is in the
medium—in the light.
I, Richard Carl Wickman, was born in Cincinnati, Ohio, October 2, 1929. I received my secondary-school education in the Cincinnati public schools, and my undergraduate training at Hanover College, Hanover, Indiana, which granted me the Bachelor of Arts degree in 1951. From McCormick Theological Seminary in Chicago, Illinois, I received the Bachelor of Divinity degree in 1954, with a specialization in Church Social Work. In 1958 I received the Master of Arts degree from Bowling Green State University in Bowling Green, Ohio. From 1958 to 1961 I engaged in doctoral studies at The Ohio State University in the Department of Speech. During those years I served as Research Assistant to Dr. John H. McDowell in The Ohio State University Theatre Collection.