INTRODUCTION

ROBERT AND HENRY ASTON BARKER'S PANORAMA

The image should stand out from the frame.
—Francisco Pacheco (1564–1654), advice given, so it is said, to his pupil by the old Pacheco when the former was working in his studio in Seville (quoted in Michel Foucault, *The Order of Things*)

This then, I thought, as I looked round me, is the representation of history.
—Winfried Georg Sebald, commenting on his visit to the panorama of Waterloo in Belgium, in *The Rings of Saturn*

On June 17, 1787, Robert Barker, an Irish artist living in Edinburgh, secured a British patent for a new medium in which, from a central raised platform, one could view 360-degree representations of any place in the world on a scale of 1:1.[1] He called his invention *La nature à coup d'oeil,* which he later translated in his London advertisements as "nature at a glance." In 1791 he changed its name to Panorama, derived from the Greek terms παμ (pan: "everything, the whole world" or "all") and οραμα (orana: "a vision")—a neologism that described both the specially designed rotunda and the circular painting that it housed.[2] As the patent specifications make clear, Barker's apparatus for "displaying pictures of nature at large" consisted of an exhibition space in which a massive picture completely surrounded spectators.

> By the invention called *La Nature à Coup d'Oeil,* is intended, by drawing and painting and a 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 begun [*sic*].[3]

Barker's ambition was to create, from a given spot, a picture of every object visible within the entire circle of the horizon with such painstaking fidelity that it could hardly be distinguished from what it represented.

To give spectators the impression that they were situated on an elevated viewpoint overlooking the countryside, Barker designed his visual medium to conceal as much as possible the fact that they were looking at a circular representation supported by the walls of a round room. The patent specifications include three structural elements necessary for the painting to have its "proper effect": an observation

platform designed to prevent viewers from getting too close to the surface of the drawing or painting; a roofing component to hide the picture's top edge; and skylights placed directly above the picture, bathing it in natural light while leaving the central platform in relative darkness.[4] These devices were meant to enhance the illusionism of an image that filled the circular room from floor to ceiling and to give the impression that the scene extended for miles in all directions. Barker further instructed that "the inner inclosure [sic] may be elevated at the will of an artist, so as to make observers, on whatever situation he may wish they should imagine themselves, *feel as if really on the very spot*."[5]

In his first advertisement, Barker described his invention as an "Improvement on painting, which relieves that sublime art from a restraint it has ever laboured under."[6] His terms indicate a teleological idea of artistic development, whereby art's purpose was to progress toward an increasingly true vision of life using the most advanced techniques of realist representation available. With an apparatus designed to conceal as far as possible the material sources of its visual effects, Barker claimed to have achieved the ever elusive goal of complete and total verisimilitude. His new medium and form of painting implicated spectators in a process of give-and-take—at once deceiving their eyes and depending on their willingness to surrender disbelief.

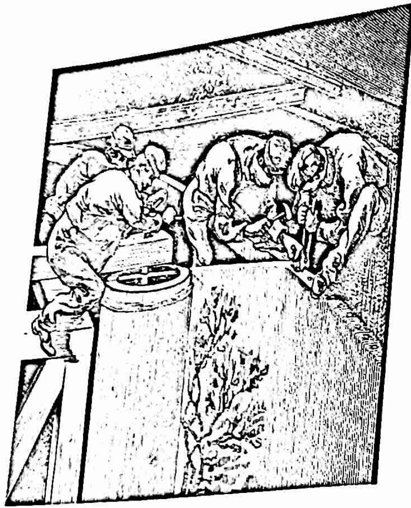
This book is a history of Robert Barker's Panorama in Britain from its patent registration in 1787 to 1818–19, when the format of the keys to the panoramas (which spectators used to locate specific objects in the view) radically changed.[7] My study contends that Barker's panorama appealed to a paradoxical spectatorship that was by turns masterly and embodied, while it solicited viewers ideologically. This patented form of painting first functioned cryptically to address a British political minority, and then, once established as a commercial enterprise in London, became increasingly bound up with discourses of imperialism. Throughout the 1790s the Panorama's financial success depended on the representation of British cities and towns alternating with that of the victories of the British fleet over Revolutionary France. By the early nineteenth century, however, almost every view exhibited in the Panorama was connected to the movements and operations of the British army or navy during the war with Napoleon and his allies. I focus on Barker's earliest panoramas—Edinburgh (1788), London (1791), the Grand Fleet at Spithead (1793), and Constantinople (1801)—to explain how these changes happened and to examine some of their consequences.

Many visitors to Barker's exhibitions commented on the spatial and temporal disjunctions the panorama created—a sense of being in two places at once:

> I have been to see Mr. Barker's panoramas, the *Siege of Flushing* [1810, Figure 5.17], and *Bay of Messina* [1811]. They are so well painted as to be quite deception, particularly the latter one, as they extend in a circular form all round the rooms and the spectators are placed in the centre the effect is very astonishing. I actually put on my hat imagining myself to be in the open air.[8]

This sense of confusion over one's location—the experience of being both in a round room and in the open air at the Bay of Messina—was frequently mentioned in reviews.[9] Inside the Panorama rotunda observers could experience a vertiginous bodily sensation brought about by being simultaneously in a building at London's Leicester Square and within the different space and time of an optical illusion—whether that sense of dislocation or transportation was produced by confronting a local scene, such as the *View of London from the Roof of the Albion Mills* (1791, Figure 2.1 illustrates a series of prints based on the painting, a structure that had burned down by the time of the exhibition), or an overseas vista, such as the *View of Constantinople* (1801, see Figure 4.1 for the prints made twelve years after the painting) from the vantage point of a former Genoese military tower. Supporting Barker's grandiose claims about his paintings' realism, critics suggested that their immersive sense of place provided viewers with a substitute for travel.[10] To introduce spectators to the paintings, Robert and his son Henry Aston Barker provided keys (and, after 1801, reference books) and gave lectures to successive groups of spectators gathered on the observation platform. The educational side of the experience, coupled with the sheer sense of their physical centrality with regard to the scene, encouraged spectators to see themselves as participants in the countless linkages and networks being established between the metropolis and the wider world.

During its first three decades, the Panorama was a site for the formation of both national identities (first Scottish, then British) and different subjectivities. Over the years, the panorama's unbounded illusion of space came to function as a metaphor both for the social reality of the British Empire and of the uncontainable singularities of the spectator's body. By transporting its viewers to other places in the city, country, or world, the panorama created a spatial and temporal disjunction between a "here and now" and a "there and then" that became a crucial locus for forming new identities. The Panorama functioned as a forum for producing a new sense of self, one defined partly by the relationship of the spectator, located at the center of Britain's largest metropolis, to the increasingly distant cities and British military victories represented in its two "circles of observation." The panorama was a visual form that operated on both intellectual and somatic levels to convey ideologically powerful messages. My interest is not only in what subject matter the Barkers represented during the period under examination but in how it was seen, and by whom. I consider the different modes of viewing that the panorama as a visual form invited, namely, looking at objects in deep space from a fixed position, and—more distinctively for these images—looking combined with movement, and how they may have



hot-air balloons.[17] Barker's Panorama offered simulated figures of the horizon as seen from different places in the world to spectators eager to be taken in by extremely lifelike imitations of reality. Indeed, spectators were known to have tossed coins at the canvas to find out how far away it was.

Although Barker's optical show was judged harshly by some critics and connoisseurs for merely mimicking the appearance of nature, "Mr. Barker's exhibitions drew huge numbers of curious people from all walks of life and were extremely successful in other countries where panoramas were made or toured."[18] During the French Revolutionary Wars (1793 to 1802)—when scenes involving the British fleet counted for about half of all of the images represented in the Panorama—based on the weekly cash deposits made to Barker's bank account, the number of spectators who visited the Panorama was as high as forty thousand a year.[19] During the Napoleonic Wars with France (1803–15), nearly every image shown at the Panorama had to do with movements of the Royal Navy or the British army. Barker's, and after 1805 his son's, bank account indicates that during the Peninsular War (1808–14), the number of annual visitors rose to sixty thousand, and during the exhibition of the panorama of the Battle of Waterloo in 1816, they soared to upward of two hundred thousand.[20] From 1793 to 1820 over a million and a half people visited the Panorama at Leicester Square.

Once he had established his Panorama exhibition in London, Robert Barker found different ways to transport his panorama views abroad. A copy of his *View of London*, made after his series of prints, was exhibited in Greenwich Street, New York, in 1795. He sent his painting of London on a tour to Hamburg, Leipzig, Vienna, and Paris, and sold his concept to the American inventor Robert Fulford, who immediately sold it to James Thayer, in Paris. Thayer built two Panorama rotundas, connected by the *Passage des Panoramas*, on the Boulevard Montmartre. Panoramas thereafter became an international phenomenon, with rotundas based on Barker's design springing up throughout Europe and North America. By 1810 all of the major cities of Europe had at least one Panorama. An ingenious entrepreneur, Johann Michael Sattler, built a movable rotunda made up of planks of wood and a copper roof that could be dismantled, and set off

Figure I.2. *Nailing on the Canvas*, n.d. Engraving from Albert Hopkins, *Magic, Stage Illusions, and Scientific Diversions* (London: Low, 1897), 356.

in 1830 on a thirty-thousand-kilometer tour of Europe's smaller cities and towns.[21] The world exposition in Paris in 1900 featured seven different kinds of panorama, including a Cinéorama, the first motion picture panorama, designed by the French engineer Raoul Grimoin-Sanson. It drew audiences away from the stationary, round paintings with its six-minute film, projected in 360 degrees on a polygonal room, of a hot-air balloon rising fifteen hundred feet into the air, and its return back to land.[22] Popular interest in circular paintings waned with the advent of film, the first cinemas often occupying the same urban locations as the Panorama once did. However, many Panoramas are still in operation. Several from the nineteenth century survive in Europe and the United States, and, since the 1980s, new Panoramas of historic battles have been built in China, North Korea, Egypt, Israel, Iraq, and Turkey.[23]

While Barker began by exhibiting cities and towns in Scotland and England, the Panorama became increasingly intertwined with discourses of imperialism through representations of the recent victories of the British fleet and the port cities from which these battles were launched. Imperialism, as W. J. T. Mitchell defines it, "is the name of a complex system of cultural, political, and economic expansion and domination that varies with the specificity of places, peoples, and historical moments."[24] In the late eighteenth to the early nineteenth century, the phenomenon of imperialism centered on the rise of European nation-states. According to Michael Hardt and Antonio Negri, the ancient notions of empire "teach us . . . Empire is formed not on the basis of force itself but on the basis of the capacity to present force as being in the service of right or peace."[25] Moreover, "Empire is not born of its own will but rather is *called* into being and constituted on the basis of its capacity to resolve conflicts."[26] By presenting a series of engrossing scenes of the various stages of the wars between England and France to tens of thousands of spectators, the Barkers' exhibitions supported the operations of the nation-state by helping make "a people" out of the multitude.[27] Through their close connections with naval officers, the Barkers obtained eyewitness drawings of the battles that enabled them to position the groups of observers who gathered at the center of their panoramic battle scenes on the winning side of power.[28] That the final outcome of the almost uninterrupted twenty-two-year conflict was uncertain, however, made the Barkers' panorama images all the more effective at forging a sense of national identity.

Rather than assume that there is an intrinsic and self-evident connection between the medium of landscape and imperialism, however, I seek to discover precisely where and how the changes in the Panorama's form and subject matter began to strategically solicit the active participation of its spectators in ways that helped naturalize Britain's imperialist goals. To document the connections that can be drawn between the processes of formal change and broader cultural change, the follow-

ing chapters draw attention to the ambivalences inherent in certain aspects of the Panorama's material form, which, as the evidence suggests, made visiting it such a disorienting and overwhelming, rather than a stabilizing and empowering, experience for some of its spectators. At the same time, the chapters address the historical complexity of its emergence into the different cultural and political milieus of late-eighteenth-century Edinburgh and London.

The four case studies and broad overview presented in this book offer different perspectives on the part the Panorama may have played in transforming its spectators' subjectivity. They emphasize the reciprocal relationship between the panorama exhibitions and their audiences by posing the compound question: what views were represented in the Barkers' panoramas during this period, and what meanings did the different publics that it brought into being in Edinburgh and London give to them?[29] Thus, I attempt to reconstruct the circumstances in which the Panorama emerged in Britain as a way to generate new shared realities, identifying the people involved in its production and the expectations placed on audiences while pointing out the meanings it may have had for its different observers.

Approaches to the Panorama

Many of the publications on the history of the Panorama have adopted an all-encompassing overview of its subject typical of the 360-degree paintings themselves. For instance, Ralph Hyde's *Panoramania!* exhibition at the Barbican Gallery in London in 1988 was devoted to "panoramas of all types and in all places, from the invention of the first to the painting of the most recent."[30] Another exhibition, Stephan Oettermann's *Desire to See*, at the Kunsthalle in Bonn in 1994, took on the same project on an even larger scale—exhibiting a wealth of rare documents, images, and panoramic installations.

In general, scholarship on the panorama has tended to locate Robert Barker's invention, which he advertised as an "improvement" on, or "emancipation" of, "the sublime art of painting,"[31] outside the category of art. For example, one study of the panorama, Richard Altick's *Shows of London*, published in 1978, contains a chapter on Barker's panorama in which Altick argues that since the new method of painting was immediately put to commercial use, the panorama "belongs to the history of entertainment rather than of art."[32] In her chapter on the influence that panoramas had on exhibition landscapes shown at Somerset House, however, Ann Bermingham cautions her readers that because Thomas Girtin, William Daniell, Edward Dayes, Joshua Cristall, William Mulready, Ramsay Richard Reinagle, David Roberts, and Clarkson Stanfield all produced panoramas, "it was not necessarily looked down upon as an unworthy occupation for serious artists."[33] Scott Wilcox made the same point in an earlier study of Barker's Panorama, where he writes that "the simple dichotomy of 'high' art and 'popular' art, each with its own distinct public, was blurred; it was blurred but never forgotten. The panorama always occupied an uneasy position in that ill-defined region between art and popular entertainment."[34] The following chapters corroborate this claim that the historical processes involved in categorizing Barker's invention were never clear-cut. Indeed, my book as a whole contends that panorama images actually disrupted categories of art, scientific representation, and "popular" entertainment, and brought about a whole new set of freedoms and constraints that spectators negotiated collectively on the Panorama's platforms.

More recently, in their case studies of specific panoramas produced in Britain and France after the 1820s, Michael Charlesworth, John Zarobell, and Robert Aguirre have drawn connections between this visual form and imperialism. Charlesworth's study of Robert Burford's *View of the Island and Bay of Hong Kong*, exhibited in 1844 at the Panorama in Leicester Square, shows how the supposedly factual information in the textual and visual representations that accompanied the image of the new British colony solicited "the viewers' identification with a particular position of power."[35] Aguirre's study of the *View of Mexico* exhibited in London in 1825 examines "how the panorama served not only as domestic entertainment but also as a machine for producing imperially minded viewers."[36] And in a similar vein, Zarobell's essay on the *View of Algiers* exhibited in Paris in 1833 argues that the panorama's "perceptual mechanism" helped advance French imperialism.[37] While these studies shed new light on how the panorama functioned as a propaganda tool in Britain and France during the second quarter of the nineteenth century, it would be imprudent to apply their conclusions to the visual form retrospectively. By analyzing the historical and social circumstances of the Panorama's first exhibitions, my study fills a gap in scholarship by demonstrating precisely when it came to function in this way.

Two major studies that have approached the topic from different directions are Oettermann's *Panorama: History of a Mass Medium*, first published in German in 1980 and translated in 1997, and Oliver Grau's *Virtual Art: From Illusion to Immersion*, first published in German in 2001 and translated in 2003. Oettermann's book covers the history of the Panorama in England, France, Germany, Austria, and the United States. Adopting the class-based analysis of social art history, he argues that the panorama is "the pictorial expression or 'symbolic form' of a specifically modern bourgeois view of nature and the world."[38] Working with the assumption that the invention of the Panorama marked an abrupt break with previous forms of representation, he compares its appearance in the late eighteenth century to Jeremy Bentham's Panopticon, describing the Panorama as a "complete prison for the eye."[39] As for the landscapes depicted in these representations, Oettermann stresses how the panorama "blurs, and idealizes circumstances of land ownership" for a "mass" audience, one that is broadly defined as composed of both the bourgeois and the working classes.[40]

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Oettermann's work provides an insightful discussion on the relation of the panorama to the "discovery of the horizon" in the late eighteenth century. While it perhaps can more accurately be described as an important change in the concept of the horizon, he suggests that the desire to give the elusive figure of the circle of the horizon a material form inspired the invention of the panorama form in several places in Europe at about the same time.[41] Oettermann also points out the effect of nausea, or "see-sickness," that the act of looking at the horizon in the panorama had on some viewers.[42] Oettermann does not fully explore the different ways in which those who viewed the panorama could have understood their experience. And while he identifies it as an increasingly manipulative visual form that held sway over the masses in the nineteenth century, he does not explain precisely how its powers of persuasion increased.[43]

In contrast to Oettermann's insistence that the panorama invention represents a complete rupture with the past, Grau's structuralist approach places the medium within a historical continuum that reaches from ancient fresco paintings to the panorama, circular cinema, and computer-generated virtual reality. His focus is on the different kinds of immersive illusions. In his view, panoramic illusionism is merely "the most sophisticated form of a 360-degree illusion space created with the means of traditional painting."[44] By focusing on the idea of immersion, Grau aims "to summarize and categorize existing work to present a coherent theoretical framework and analyze the phenomenologies, functions, and strategies of all-embracing image worlds to provide a historical overview of the idea of virtual reality."[45] His work emphasizes the continuity of the concept of immersion, the recurring yet different ways that artists have used realistic representations to create a sense in viewers of being transported someplace else.

While Oettermann and Grau use markedly different approaches, both arrive at the same conclusion. They both maintain that the Panorama's immersive illusionism dominated spectators by depriving them of their capacity for critical reflection on the images shown there. In doing so, the authors do not take into account the tension at work between the freedoms and constraints of the new medium, or the possibility that there could be different uses and understandings of the same images. Hence both Oettermann and Grau elide the Panorama's claim to create a stupefying, objective realism that declares, "This is how it is," with the way it actually functions as a representation for its audiences.

The Challenges of Spectatorship in the Panorama

Only by examining the Panorama's sophistication and complexity as a material technology can we fully appreciate the value of its history for our own time. Barker's invention was set apart from other forms of visual representation in London by several features, none of which was new. Rather, its novelty lay in their combination. I explore the ambivalences of the panorama as a material object, delineating the limits of its representational powers to expose not only how it failed to live up to the proprietor's claims of realism but also how certain formal aspects of the panorama images had unexpected effects. Three of the Panorama's distinguishing features—its enhanced realism, multiperspectivalism, and elevated, central vantage point—had a tendency to produce cognitive uncertainty and disorientation as much as a sense of domination and control.

The high degree of illusionistic realism of the panorama image, and Barker's contention that his apparatus would enable artists to exhibit a perfect copy of any view in nature,[46] gave a new visual form and impetus to the emerging interest in phenomenalism that, as Charlotte Klonk points out, permeated academic as well as amateur painting circles in Britain during this period.[47] Phenomenalism, as she observes, involves an attempt "to capture reality faithfully," by recording "nature *as it appears*."[48] What is important here is that Barker pushed this empiricist goal further: he introduced movement to the experience of viewing a painting, by attempting to re-create an image of nature, he tells us, "as it appears to an observer turning quite around."[49]

The effusive statements of contemporary viewers often repeated in studies on the way these paintings were received do not necessarily indicate a widespread naive belief in Barker's claims of realism. The superlifelike imagery created in Barker's paintings was based on the optical illusion created by the distance between the spectator and the painting, and the adoption of the peep-show type of illumination, which contrasted a darkened viewpoint with a brightly lit image. A review of Girtin's *Eidometropolis* of 1802, a partial panoramic view of London, relates that in conversations with the lecturer, visitors would enjoy discovering how much their eyes deceived them by guessing how large an object looked from a distance and comparing it to its actual size in the painting,[50] and presumably this kind of interaction took place with Barker's paintings as well. At the same time as the formal devices of distance and illumination enhanced the illusion, however, when the viewer looked too far downward, the dry moat around the platform dispelled the illusionism by revealing the canvas's bottom edge and the material structure that supported it.

The more real such illusions were, the more viewers looked for their deficiencies and limitations. Thus, any history of realistic representation must also take into account its failure to live up to its claims. A fascinating aspect of this visual form is how it continually encouraged viewers to suspend their disbelief and actively work to compensate for its failure to be indistinguishable from what it represented. In the rational work of looking and judging, the panorama's claim of realism was bound to fail as the painting revealed itself as a material object that represented reality in a highly

selective, miniaturized, and partial manner. The necessary distortions in the image, and its lack of sound, smell, and, in particular, movement, worked against the fantasy that one had been transported to a distant locale.

Another distinguishing feature of the panorama that created ambivalence was its display of multiple perspective viewpoints along a cylindrical canvas. To achieve the desired effect of depth and presence, Barker learned a system of perspective that allowed lines to appear straight despite being supported by a curved surface. An entry on the Panorama in the *Encyclopædia Britannica* of 1824 offers a technical description of how perspective is employed in this visual form:

> The projection or perspective of a panorama is formed by imaginary lines drawn from different points of the surrounding objects, to the point of sight in the axis of the cylinder. The intersections of these lines with the cylindrical surface form the corresponding points in the panoramic picture. Where the picture is projected on a plane, as in common perspective, and in the gnomonic projection of the sphere, the cones formed by imaginary lines or rays passing from the point of sight to the different objects, are cut by the plane of the picture; consequently, the sections being formed by a plane, are curves, of which the curvature is always simple. In the perspective of the panorama, where the picture consists of the intersection of the cones of rays by a cylinder, these intersections are, in many of the cases, doubly curved curves. When the picture of a straight line, which is neither parallel to the horizon nor to the axis of the cylinder, is drawn on the cylinder of the panorama, the picture of the line is part of an ellipse, because the oblique section of a right cylinder, by a plane passing through the axis, is an ellipse; when the cylinder is developed and unrolled on a plane surface, this ellipse becomes the curve called the sinical curve.[51]

This mathematical explanation of perspective used on a cylindrical surface, with its abstract image of "doubly curved curves," emphasizes the scientific aspect that Barker's mode of painting implied in the first decades of the nineteenth century.

Because of its massive size and cylindrical form, it was more difficult for viewers to find the single ideal point from which to view the painting. Stuart Hall describes the process of finding this point as the means by which "the spectator is painted into position in front of the picture,"[52] with the painting producing a subject position for the spectator. As Hall explains, "For the painting to work, the spectator must first subject herself or himself to the painting's discourse and, in this way, become the painting's ideal viewer, the producer of meanings, its subject."[53] Because the panorama was constructed of multiple one-point perspective views, there were several perspective positions into which spectators were painted, and thus, several different ways of entering it. To counter such waywardness, descriptive sheets with their numbered indexes instructed spectators on how to see the picture properly.

Nevertheless, the inclusion of viewers in a multiperspectival space undermines the effect of traditional perspective views, which offer a kind of visual mastery by establishing a hierarchical relationship to the objects in the image. In contrast, viewers of a panorama discover that there is no position from which they can see everything at once. This gives spectators the opportunity to consider the limits of human vision and, because it requires them to move, the limits of their own bodies. To compensate for the sense of inadequacy created by these paintings, and to get the full impact of its all-at-onceness, surely some spectators would have made a pirouette at its center. Such a heightened self-reflexivity had the potential to make spectators conscious of the act of looking and judging in the panorama, and potentially more skeptical of what they were being encouraged to believe by the images, the accompanying explanatory materials, and the ever-present lecturer, who, as several of the keys point out, "always attends to explain the painting."[54]

Yet another feature that produces a profound sense of ambivalence and disorientation, and which is imbricated with the two already mentioned, is the way that the panorama enfolds spectators within a literal figure of the horizon. By incorporating a place for the spectator at the middle of the painting, Barker's invention enabled observers to obtain an *internalized* view of the scene represented.[55] This viewing position set up a relationship between spectator and image that was not strictly visual.[56] Raised up on a platform, looking outward onto an all-encompassing, multiperspectival painting illuminated by concealed skylights, spectators were invited to immerse themselves fully in the space represented. In this situation they could consider themselves as being either in a separate space from, or inside, the painting.

The panorama offered a phenomenological and multisensory experience of looking because it surrounded the viewer's entire body. Several spectators who wrote about the experience of seeing the panorama described the corporeal effect that it had on them. One journalist, who visited *Lord Nelson's Defeat of the French at the Nile*, exhibited in 1799 (Figure 4.9), commented that "as soon as you enter, a shiver runs down your spine. The darkness of night is all around, illuminated only by burning ships and cannon fire, and all so deceptively real."[57] The same writer, describing his experience of seeing the panorama of Brighton, exhibited in 1797, declared, "I was so captivated by the sight that I held my breath, the better to take in the wonder, the sublimity of it all."[58] In the panorama, seeing and knowing became intertwined with profoundly sensual, visceral responses, not all of which were pleasant. In his book on aesthetics published in 1805, Johann August Eberhard blames the feeling of disorientation he experienced while visiting a panorama on contradictions inherent to its materiality:

> I sway between reality and unreality, between nature and non-nature, between truth and appearance. My thoughts and my spirits are set in motion, forced to swing from side to side, like going round in circles or being rocked in a boat. I can only explain the dizziness and sickness that befall the unprepared observer of the panorama in this way.[59]

Such a reaction may have been caused because he was moving too quickly at the center of the panorama's 360-degree perspectival illusion.

The unsettling effects of seeing in the Panorama are perhaps also due partly to the ambiguities of the figure of the horizon itself. Aron Vinegar describes the contradictory nature of the representation of the horizon:

> One might say that the horizon is a seam within representation. Far from a simple line that fixes the limits of vision, the horizon simultaneously enables and negates fundamental dichotomies such as inside and outside, finitude and transcendence, distance and immersion, the intelligible and the sensible, embodiment and disembodiment, the subjective and the objective.[60]

The experience in the panorama of being encircled by the horizon, a limit that questions all limits, apparently could disrupt one's equilibrium and composure.

To alleviate this effect, the Barkers continually tried to manage what spectators paid attention to in the panoramas by making changes to the design of the keys. The two practices of the coup d'oeil mentioned in Bigg's study as important to the invention of the Panorama are exemplified in two drawings. The first is Horace-Bénédict de Saussure's *Circular View of the Mountains as Observed from the Summit of the Buet Glacier*, of 1776 (Figure 5.5), which Vinegar describes as a picture that captures the enthralling, immersive effect of the experience of the Alps.[61] The second is the lesser-known *A Circular View of the Horizon from the Steeple of the Church of Dieghem*, of 1745 by George Schultz (Figure 5.6), a topographical view of the encampments of the Duke of Cumberland's army. In contrast to Saussure's somewhat concave drawing of his experience of the view from Mont Blanc's highest peak, Schultz's drawing offers its intended viewer, the Duke of Cumberland, a convex, commanding vantage point from the church steeple. With these two examples in mind, a study of the first and the second-to-last circular panorama keys, *Explanation of the Panorama View of the City of Bath and the Entire Surrounding Country* of 1794 (Figure 5.1) and *Explanation of the Battle of Waterloo* of 1816 (Figure 5.2), can be seen to follow a trajectory that moves away from the geographic, immersive model of the coup d'oeil of Saussure to the military coup d'oeil of Schultz. In the later circular keys, the spectator is shown to occupy a central position elevated as if on a pinnacle above a topographical image, which appears to recede toward a horizon that coincides with the limits of the entire planet. In the late eighteenth century the meaning of the horizon changed from a limit, a way to circumscribe space, to connote infinity.[62] The later keys provide a visual representation of this new concept of the horizon. The study of keys from 1793 to 1820 reveals the proprietors' many attempts to manage and prevent, through changes in design, and presumably in the lectures as well, the disturbing sense some spectators had of being overwhelmed by the image's immersive space. Significantly, the Barkers' keys gradually shifted from being modeled after a naturalist's coup d'oeil to a military one, whether the subject matter was a city view or a battle scene. In this way, the keys came to epitomize imperialist expansion and domination.

The Exhibitions

Barker's inaugural exhibition of his new visual form was a 360-degree painting of the *View of Edinburgh and the Surrounding Country from the Calton Hill* (Figure 1.1), which was first shown in Edinburgh's New Town at Archers' Hall in the Meadows near Holyrood Palace and at the New Assembly Rooms, from January 31 to June 8, 1788.[63] The painting was then transported to London, where it was exhibited at a popular exhibition hall at 41 Haymarket, from 1789 to 1791.[64] Barker's display of a second painted vista opened in London in 1791, where the *View of London from the Roof of the Albion Mills* (Figure 2.1) was exhibited in a circular structure he had constructed in his backyard on Castle Street, near Leicester Square.[65] By 1793 Barker had built the Panorama rotunda at the center of London's entertainment district in Leicester Square,[66] which until his death in 1806 he operated with Henry as a commercial enterprise. Henry ran the business until 1822,[67] when the success of his Waterloo panorama allowed him to retire. He transferred the management to John Burford and his son, Robert, who ran it until it closed permanently in 1863.[68]

The panoramas exhibited by the Barkers no longer exist. As noted on the printed key to *Two Views of Paris*, of 1803 (Figure 5.19), they were either painted over and used again, or small sections were sold to decorate the walls of domestic or public buildings.[69] Nevertheless, evidence of what these original views looked like is available from several sources. Three extant series of prints reproduce the paintings of *View of Edinburgh and the Surrounding Country from the Calton Hill*, *The View of London from the Roof of the Albion Mills*, and *Panorama of Constantinople and Environs*. The aquatinted cross-section of the Panorama rotunda at Leicester Square (see Figure I.1), drawn by its architect, Robert Mitchell, in 1801, represents several observers visiting the two views in the lower and upper circles of observation (the *View of Plymouth* of 1797 and the repainted *View of London from the Roof of the Albion Mills* of 1795).[70] As well, all of the thirty-eight paintings exhibited since the opening of the Panorama at Leicester Square from 1793 to 1820 are recorded in the inexpensively produced keys given to visitors to the Panorama free of charge—until 1812 when Henry Barker began to sell them for sixpence.[71] The early keys provided either schematic diagrams or images to help viewers identify objects and sites in the painted representations. Reference books that accompanied the views exhibited after 1801 also exist.[72] Like tourist guidebooks, the reference books provided background information on the exhibited scene and a description of the major objects represented.

Through these and other sources, such as diaries, letters, reviews, and advertisements, I investigate the complex ways in which panorama images

were produced, marketed, and appropriated in Britain. The following chapters are designed to permit an analysis of the internal tensions at work between the constraints that individual panoramas imposed on viewers and the possible ways that spectators eluded or denied these constraints.

The Panorama rotunda's two compartments allowed spectators to compare different painted vistas, and in the years after its opening, various cities of Britain and Europe were juxtaposed with representations of the dramatic victories of the British fleet, most of which involved confrontations with France.[73] Thus, while a panorama painting like the *View of the Grand Fleet Moored at Spithead* (see the key in Figure 3.1) of 1793 was shown on its own, in 1795 a repainted version of the *View of London from the Roof of the Albion Mills* (Figure 2.1) was exhibited for several months alongside Admiral Howe's victory known as *The Glorious First of June* (see the key in Figure 5.11); in 1802 the *View of Constantinople from the Tower of Leander* (Figure 4.3) was exhibited with *Lord Nelson's Attack of Copenhagen* (see the key in Figure 5.13); in 1810 the *Grand View of La Valetta, Malta* (see the key in Figure 5.16), was exhibited with the *View of Flushing during the Siege* (see the key in Figure 5.17); in 1816 the *View of the Battle of Waterloo* (see the key in Figure 5.2) was exhibited with the *Battle of Paris*; in 1818 the *Lord Exmouth's Attack upon Algiers* (see the key in Figure 5.20) was also shown with the *View of St. Petersburg*; and, finally, in 1819 the *North Coast of Spitzbergen* (see the key in Figure 5.22) was joined with the *View of Lausanne and Lake of Geneva* (see the key in Figure 5.21).[74] Thus, once established in London, the Panorama offered representations of the latest battles won during the wars against France, frequently exhibited along with views of strategically important cities and ports.

The panorama presented viewers with a succession of images in a space where comparisons could be drawn between domestic and foreign cities and towns, and where knowledge could be gained and exchanged about recent sea battles of the British fleet. As one nineteenth-century commentator noted, the panorama gave form to the most topical subjects and current events: "Every war by sea and land, every scene of interesting incident or discovery, every locality of special natural beauty, every great public ceremonial, has been illustrated in this vivid and ingenious pictorial invention."[75] Not only was the selection of images topical, but their central vantage points were symbols of power in their own right. The first panoramas represented Edinburgh from the observatory at the top of the Calton Hill; London from the roof of the Albion Mills, the first steam-powered flour mill in Britain, owned by Matthew Boulton and James Watt; the Grand Fleet of the Royal Navy at Spithead, thirty-five of the world's most technologically advanced ships arranged in two parallel lines in preparation for a review by the king; and Beechen Cliff overlooking the new Georgian architecture in the town of Bath. Battles at sea taken from the vantage point of one of the ships of the line, as well as battles on land, were recorded in panoramic and aerial views in the paintings and keys from 1975 onward. Britain's almost uninterrupted war with France from 1793 to 1815 gave the panorama a steady supply of riveting subject matter. The striking realism, together with the central viewpoint of key moments of recent naval victories, animated national feeling, as Altick has suggested, and functioned as a new kind of instant-history painting, or "pictorial journalism," for a new public eager to learn about and discuss with others exactly how the navy had defeated its enemy.[76]

By the example set by the rising national heroes, Admiral Nelson and the Duke of Wellington, battle panoramas taught collective audiences that courage in battle was glorious and that dying for one's country was the ultimate glory.[77] In the early nineteenth century, the nation, as much a spiritual as a political entity, drew together in the fight against Napoleon's gamble for world power. The resulting series of battles represented to growing audiences at the Panorama betrayed Britain's own imperial ambitions. The panoramas, together with the keys (which offered increasingly elevated and commanding views), invited spectators to project themselves into their images and engage in a struggle to decipher their messages. In these complicated structures and compositions, viewers appear to have found pleasure in gaining control over the images by working them out rationally and enthusiastically with others. As one spectator, Benjamin Silliman, wrote in 1805, "I am fond of panoramas, especially of battles. Their magnitude, the consequent distinctness of the objects, and the circular position of the canvass [*sic*], corresponding with the real horizon, all tend to give one the strongest impression of the reality of the scene."[78] By taking up the challenge of figuring out through keys and reference books how these images conferred power on British subjects, observers became the active agents that made the images work as ideology. The more spectators gained purchase over the images in this way, the more they became subject to the images' control. To authorize the British government's actions effectively, the panoramas required that spectators suspend their disbelief, and compensate imaginatively for the panoramas' multiple defects, distortions, and limitations, by buying into the fiction that they were actually at the place where the view was taken. In making this kind of effort to comprehend these realistic representations, viewers gained access to the kind of knowledge that incorporated them into the nation and its growing empire.

The location of the Panorama rotunda behind the shop fronts at the northwest corner of Leicester Square (Figure I.3) both benefited from and contributed to the square's creative and inventive associations.[79] By having his visitors walk from the entrance down a narrow corridor over seventy feet long to the rotunda, Barker managed to obtain an address for his exhibition on the square itself. By the late eighteenth century, Leicester Square became known as the "Square of Squares," the favored location of many of the city's writers, scientists, and artists, including William Hogarth, Sir Isaac Newton, Sir Joshua Reynolds, Thomas Gainsborough, Samuel Johnson, David Garrick, Oliver Goldsmith,

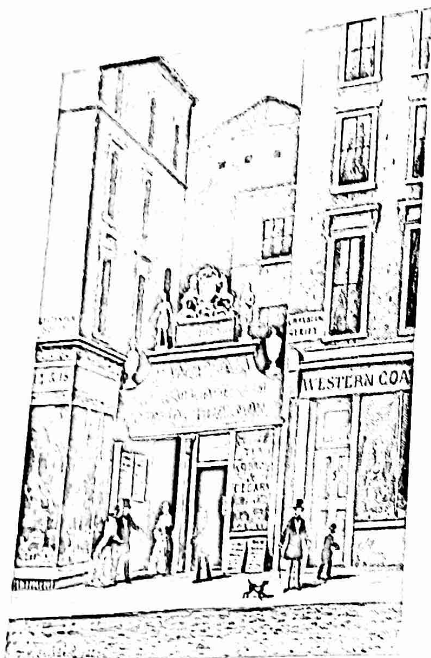

Figure I.3. Thomas H. Shepherd, *View of the Entrance to Burford's Panorama, Leicester Square*, 1858. Watercolor, 8.8 x 6.7 inches. Copyright the Trustees of The British Museum.

Fanny Burney, Charles Dibdin, Edmund Burke, Sir Thomas Lawrence, Richard Wilson, John Hunter, William Cruikshank, and Charles Bell.[80] The associations of Leicester Square with such well-known figures in literature, science, and art led it to become the unrivaled center for London's public amusements.[81] As one historian writing in the nineteenth century put it, while Covent Garden was known for its theater and music hall, Leicester Square had everything, "theatres, music halls, panoramas, *poses plastiques*, exhibitions, galleries, &c., &c."[82] Indeed, during the period when Barker's Panorama was located on the square, other popular amusements in the neighborhood included Philippe Jacques de Loutherbourg's Eidophusikon (a small theater of changing scenery shown intermittently); Dibdin's theater, the *Sans Souci*; the magic show *The Invisible Girl*, which took over Reynolds's studio; Miss Linwood's display of art needlework in Savile House; Sir Ashton Lever's Holophusikon (a cabinet of curiosities that included stuffed animals, the costumes of foreign nations, and antiquities); and John Hunter's museum of anatomical specimens.[83] In addition, many taverns, restaurants, and coffeehouses catered to the wide-ranging communities of inhabitants and visitors of the area.[84]

As a novel urban cultural form, the Panorama appealed to a newly constituted and broad audience, one that encompassed many social groups who formed the public for the fine arts. Pierre Bourdieu and others have explored how social identities are forged through images and through the distinctions that members of particular social groups or communities made between images, and each other.[85] But social groups are also constituted through conflict over representations. Roger Chartier makes the important point that the "mechanisms that regulate the working of society and the structures determining relationships between individuals need to be understood as the result of continually conflictive and antagonistic representations of the social world."[86] While it drew spectators whose social and cultural identities may have differed from those who supported other established forms of representation, it also allowed for divergent readings and interpretations. My interest in the Panorama thus lies not in raising the panorama image into a canon of art but in investigating what this form tells us about Britain's metropolitan culture that cannot be learned from the massive literature on British landscape art and topographical prints.

In his work on the history of print culture, Chartier maintains that texts take on meaning within a triangular process of exchange. Insisting that meaning does not reside in the object, he asserts that meaning is produced in the gaps between "the text itself, the object that conveys the text, and the act that grasps it."[87] Clearly there are significant differences between the print culture Chartier assesses and the panorama as a structural and visual form. Nevertheless, Chartier's emphasis on exchange—in particular, his insistence that spectators who actively engage with any representational system generate meanings from it beyond those circumscribed in advance by the producers of such systems—is pertinent to the study of the panorama and its audiences.[88] Although the spectators' uses of the panorama are difficult to trace historically, the documents associated with the exhibition of individual panoramas (the keys, maps, and reference books that were sold to or made available to a viewing public) provide a way to recover some of the panorama's historically specific usages and to assess its role as a context for formulating new subjectivities. The keys that encouraged spectators to identify specific objects in the view are particularly important here. While the paintings' subject matter changed from 1787 to 1820, their form—in terms of size, shape, and painting style—did not. In contrast, the design of the keys changed markedly. I propose that the keys were intermediary objects that operated in the spaces between the panorama artist, the painting itself, and the spectator who viewed, interpreted, and responded to the image.[89]

The overall approach of my book, then, is twofold: on the one hand, I consider the consequences of the new observation ethos so effectively given form in the panorama, by examining the various attempts by the artists who designed it to control how viewers experienced these images. The keys, the reference books, and the lectures were all strategies to constrain meaning and together can be seen as an effort to forge consensus among the panoramas' many viewers on the legitimacy of the actions of the nation-state. My book thus seeks to advance scholarship on the panorama by considering how the form and location of London's Leicester Square Panorama became inextricably intertwined with paintings of geographic sites and events that were central to Britain's economic interests and imperial aspirations. It investigates how the panorama in its transitional years increasingly represented the interrelations between the "home" of domestic space (represented by the panoramic edifice at Leicester Square) and the "world" (represented as Britain's victorious battles at sea or on land and distant urban markets) of an expanding global network.[90] Thus the panorama positioned spectators at the

center of the center in the "Square of Squares." The home and the world consisted of two mutually supporting entities that worked to instill belief in the cultural, economic, and moral benefits of British imperialism to the world.

On the other hand, a desire to find meaning in the plural and creative practices of ordinary culture also lies at the heart of this project; to this end I emphasize how spectators conformed with or eluded the panorama's official determinations by concentrating on the role of consumption in the production of meanings. The archive of prints, advertisements, pamphlets, and keys related to the panorama are explored to identify the major oppositions that lent different meanings to particular paintings.

The Chapters

The first two chapters focus on the shift in interpretive communities that was part of the panorama's move from Edinburgh to London. Chapter 1 addresses the panorama's origin in Edinburgh within a specific membership community that sponsored Barker's first painting, *View of Edinburgh and the Surrounding Country from the Calton Hill*. Making use of the evidence found in the reference book published to accompany the prints of this first panorama, I show that the new visual form and its subject matter promoted two different modes of experiencing the panorama, which I differentiate by using the terms the *map* and the *tour*.[91] With respect to the space of the image, a maplike usage and description of the panorama's illusionistic space consisted of identifying sites for spectators in a sequential and systematic left-to-right movement across the image's surface. In contrast, the tour mode of spectatorship and description allowed the observer to tie the image to dynamic narratives of space, most importantly here, a narrative about Scotland's Jacobite history that obliged the viewer's eyes to jump to and fro across the image. This type of viewing practice allowed viewers to engage with the encircling painting "as a whole," rather than in separate, consecutively viewed parts.

The exhibition of the panorama within a new context—that of London—is the subject of chapter 2. Here the efforts to sell the *View of Edinburgh* in this new metropolitan context, beginning in 1789, are examined in light of the issues that arose when the painting was exhibited to audiences with different politics and loyalties in the capital of the British nation, as opposed to those in the regional center of Edinburgh. This chapter also explores Barker's second panorama image, the *View of London from the Roof of the Albion Mills*, first exhibited in 1791, in relation to many of the other exhibitions taking place in the city at the same time. The *View of London* enacted a visual and spatial connection to another important exhibition once held at Leicester Square. First exhibited at the back of Barker's house near Leicester Square, the image located spectators for the *View of London* on the other side of the Thames River on the roof of the infamous industrial flour mill that remained standing after a 1791 fire only as a burned-out shell.[92] This viewpoint, overlooking the entire city, provided a clear view of the entrance to the Leverian Museum in the foreground, a famous public cabinet of curiosities that was once housed in Leicester Square.[93] Hence, by conveying its spectators to a viewpoint that overlooked the new location of the museum, Barker's panorama of London at once brought memories and associations of the Leverian Museum back to Leicester Square. In doing so, his painting was linked to the museum's purpose of bringing the world to the center of London.

In 1793 the specifications of the 1787 patent were finally realized in the Panorama rotunda built at Leicester Square. The new enterprise was inaugurated by a royal visit to the *View of the Grand Fleet Moored at Spithead*, which provides the framework for chapter 3. Here I examine social status and gender in relation to the imperialistic narratives set in place by the naval image, as well as the different modes of perception allowed for by the Panorama as an architectural structure that supports and disguises the materiality of the cylindrical image. This chapter focuses on an emergent movement, or spatial practice. The panorama allowed for at least two modes of perception—a classical, static, and external type of spectatorship, and a modern, mobile, and internal mode of vision, in which sight combined more fully with the corporeal. In this chapter I examine a contemporary anecdote on the royal visit to the Panorama, which implies that the two modes of perception allowed for by the panorama were based on gender difference. I oppose this assumption by providing evidence that what was construed as the "female" mode was in fact a more physiologically accurate and scientific response to the visual form. I argue that a mode of perception associated with Queen Charlotte's response to the panorama image opened up opportunities at once for seeing against the grain (or narrative) of the image and for breaking with established notions of subjectivity.

The subtle and not so subtle interrelations between imperialistic aspects of domestic and foreign relations were an important element of the earliest panorama images, and chapter 4 analyzes the viewing positions and multiple thresholds set in place by juxtaposing two contrasting images of Constantinople in 1801. This chapter investigates issues over the shifting boundaries between Asia and Europe, the rivalry between Britain and France, and the problematic construction of a feminized "East" and a masculinized "West." By pairing two contrasting views of the city, the Panorama structure enabled spectators to move back and forth between panorama vistas, which opened up new opportunities for interpreting these images.

As a conclusion to the book, chapter 5 shows changes in notions of space and time from 1793 to 1820, represented by the keys printed to accompany panoramas of British and foreign cities and ports and notable British naval or army battles. By comparing the keys with the painted scenes that they were to accompany, I analyze how the Barkers gradually changed the keys' graphic design to convey different spatial and temporal relations in the images. This shift involved increasing the amount

of detail and perspectival depth in the images of the keys, which eventually led to a new design in which two registers of framed, rectangular perspective images were juxtaposed on the page. I argue that this new format encouraged spectators to look at the objects in the view rather than to focus on the materiality of the Panorama's physical structure, a change that corresponded to profound changes in notions of space and time produced by Enlightenment rationalism and by powerful transformations in Western capitalism itself.

Furthermore, specific instances of how the representation of space on the circular keys was practiced, in the sense that the keys could act as a site for the exchange of ideas, are explored with respect to circular keys that bear manuscript additio suggest that the lack of a coherent spatial st ture of these keys enlivened the viewer's cre imagination. In contrast, by arresting the ci lar and more abstract mode of looking at the s of the printed image of the round keys, the rec gular keys rendered the Panorama medium i ible. Thus the latter had more power to control space and time were conceived (and rememb in relation to the panorama image. They pro ed viewers directly into the picture's illusio space, instead of allowing them to remain scious of their distance from it, on the other si the gap, within the Panorama.