Preface

In Full Review Before The Eye: Visuality and the Arctic Regions

The fascination of Western culture with the Arctic regions is of ancient origin, and shows little sign of abating today, more than two millennia after Pytheas of Massalia sailed to a land he named Thule, the ultimate end of the earth. Yet throughout its long duration, this persistent attraction has been shaped by the fact that the Arctic is a place that very few people will ever see for themselves. The far North has remained, despite its ostensible "discovery," a largely *unseen* country, more vividly alive and alluring in its absence from actual sight than it ever would have been if, like other regions of the "New" world, it had been colonized and developed in the early centuries of European expansion. For this reason, the stakes in the visual depiction of the Arctic have always been different than those for nearly any other place on earth, spurring the imagination new heights, even after these depictions began to be based on the actual observations of explorers.

Imagined yet unseen, the Arctic functioned for the nineteenth century much as the Moon and outer space did for the twentieth: a place where, against a backdrop of nameless coastlines and unfamiliar seas, the human drama was enacted in its most condensed and absolute form. There explorers, aided only by their wits and science, traveled in capsules of civilization, in which were condensed a miniature array of the distant comforts of home. And, just as photographs and televised images of the astronauts wandering across the lunar soil framed the era of human space exploration, sketches, watercolors, and – eventually – photographs, brought back to Western eyes those long-sought glimpses of geographical extremity which, by their utter unfamiliarity, so excited the sense of what Chauncey Loomis has aptly dubbed the "Arctic Sublime."ⁱ

In this way, the Arctic not only emerged as a recurrent subject of romantic landscapes from the era of Friedrich to that of Church, but dominated popular artforms, among them fixed and moving panoramas, magic lantern shows, and illustrated books and newspapers. Indeed, in the panoramic sweep of its general fascination, no other subject so marked the period from the end of the Napoleonic Wars to the 1870's. In so many figures of this age, from painters such as Friedrich, Landseer, and Church, writers such as Dickens, Thoreau, and Verne, as well as in the show-halls and galleries of innumerable cities and towns, the Arctic came to stand as the utmost crucible within which the human soul could be tested. The public, unable to ever fully absorb the unearthly landscapes within which these dramas were enacted, again and again demanded "proof ocular" of those who returned, patronizing shows which could claim the authenticity of being based upon "sketches made on the spot," and gazing at glass cases of polar relics with a reverence equal to that usually reserved for the bones of saints.

Of course, not all was Art – Commerce was close behind, along with the heavy footfall of geographical nationalism. Much as with the quest for the Moon in the 1960's, the drama of achieving the Northwest Passage, or some furthest North, was the subject of national conquest, claimed and re-claimed for Britain, the United States, or Norway. Scenes of sailors planting their flag upon strange strands appeared on tea-tins, cigarette-cards, and bunting-draped platforms, as nation followed nation through the turnstile of ice-choked waters. Sir John Franklin, whose disappearance in the late 1840's was the

greatest mystery of its age, became in death what he could not have been alive: a powerful force for sympathy between the United States and Great Britain, as both countries vied to solve the enigma of his final fate. Today, it is difficult to imagine anyone on earth so lost that fourteen years would be required to find him – and yet that was how long it took to discover the last, sad leavings of the Franklin expedition, none of whose 129 men ever returned to cross the threshold of home. The search for Franklin was featured throughout those years in the illustrated press on both sides of the Atlantic, debated in pamphlets, praised in sermons, and speculated on by self-proclaimed psychics and mesmerists.

Yet despite the sea of words with which the writers of the day sought to capture the thrill of those forbidding shores, it was principally through the technologies of *vision* that the Arctic was most keenly and energetically sought. In an age without the instantaneous prisms of film and television, the sketch-pad and the brush were the only instruments by which some glimpse of these lands could be returned. It is remarkable to note that this interest quite powerfully transcended the conventional boundaries between "fine art" and popular painting; the Arctic was as important a subject upon the easel as it was upon the printing-press. That the emergence of media such as the panorama and the magic lantern, through whose assistance a vision of ice and snow could be conveyed to a vast public, along with the development of the illustrated press, were almost exactly coeval with this public fascination with the North, was a coincidence which had important consequences for both.

The first of these visual media was the panorama, in its original form a massive, circular painting viewed from a platform in its center, so arranged and displayed that patrons had the impression that they had been magically conveyed to the actual place. To us today, for whom 'virtual reality' is such a catch-phrase, it's not difficult to imagine the response of these first viewers of these gigantic paintings. Robert Barker, the inventor of the form – he received a patent for it in 1796 – initially painted scenes of cities along with military subjects. His depiction of the British fleet at Spithead was said to be so realistic that it made Queen Charlotte seasick, and his painting of the Battle of Copenhagen was visited and endorsed by Lord Nelson himself. In the years just after the conclusion of the Napoleonic wars, Barker's need for new subjects happily coincided with the Royal Navy's need for new exploits for its commanders, and three Arctic subjects appeared at his Leicester-square establishment between 1819 and 1850, more than any other landscape subject.

Rival shows soon sprang up, many of them employing a moving roll of canvas in the place of a large, fixed circle; even Barker's very first Arctic subject was soon copied by one of these "moving panoramas" which appropriated both its images and the text of its programs. Such shows employed a lengthy roll of canvas or linen, upon which scenes were painted in sequence, their story elucidated by the declamatory lessons of "professors" whose training was unlikely to have been obtained at a university. A daguerreotype of one such show survives at the Fine Arts Museums of San Francisco (plate 1); in it, a formally dressed man in top hat, frock coat, and white gloves stands before a section of a panorama depicting a moonlit field of snow, over which reindeerdrawn sleds are passing in a wintry caravan. His expression is sanguine and dignified; surely here, he seems to indicate, is a medium and matter of substance, deserving the respect and interest of the viewer.

Such shows toured the provinces well into the 1830's, bringing images and information before the public eye in a medium which required neither literacy nor 'book learning' to appreciate. A revival of interest in the moving panorama in the 1850's coincided with the peak of interest in the search for Franklin, and produced a dozen or more moving panoramas in both Britain and the United States, many of which were still touring outlying areas of their respective countries as late at the 1870's. The Nares

expedition in Britain, along with the Greely expedition in the U.S., produced a final flurry of such subjects, and even at century's end the Franklin relics, accompanied by an Arctic sledging tableau, were the star of the Royal Naval Exhibition of 1891.

From its inception, of course, the panorama pushed the conceptual boundaries of the fine arts. Barker took the trouble to give a skeptical Sir Joshua Reynolds a personal showing of his panorama of Edinburgh, and received from him an endorsement that – almost *despite* its shocking degree of realism – the panorama could indeed by admired as art. Of course such grand circles as Barker's, elaborately painted in oils in a process which typically consumed months, were one thing – the "moving" panoramas, dashed off in distemper on enormous rolls of canvas, linen, and even paper, were clearly another. Yet despite their more populist bent, moving panoramas attracted notable academic artists to the medium; in Britain, Clarkson Stanfield and David Roberts contributed numerous such panoramas (Roberts even an Arctic one), while in the United States the legendary Panorama of Pilgrim's Progress included designs by Church, Cropsey, and even Henry Courtney Selous, for many years the principal painter-in-residence at Barker's original Panorama at Leicester Square.

The panorama – with its promise of an 'all-encompassing view' – was in fact the quintessential medium of its day, a sign both of the yearning of art for a broader audience, and the yearning of the public for art which transcended the sometimes staid subjects of academicians. It blended science, geometry, exploration, and art into a form in which education and entertainment were blurred, high and low art conflated. It even cast its fascinating shadow over the fine arts; Friedrich's Arctic subjects were at least in part inspired by panoramas of the subject, and the massive, curtained installations of midcentury landscapes such as those of Church in many ways took their cue from the manner in which moving panoramas were displayed. Even Sir Edwin Landseer, most of whose canvasses were modest-sized portraits of Royal beagles and garden birds, chose a the panoramic proportions of 36 by 96 inches for his powerfully disturbing Arctic canvas, "Man Proposes, God Disposes." Throughout this era, the Polar regions continued to fascinate artists of every level, inviting their fancy, and even – in the case of Church and William Bradford – drawing them to undertake their own expeditions to the North, that they might paint icebergs and polar bears from life.

Light – illumination – was also a key element in the visual culture of the early-tomid nineteenth century, and here again the Arctic was a subject with a particular connection to singular forms and phenomena of light The Aurora Borealis with its plenitudes of color was a recurrent subject, while the dual conceptions of eternal sunshine and endless night sparked the imagination still further. In 1850, the Leicester-square Panorama featured a bifurcated circle, with one half devoted to each unearthly season, and magic-lantern slides were designed to show how the sun set for months at end on the horizon. The development of the koniaphostic or "lime light" by Michael Faraday and others illuminated many of these shows; in addition to fuelling new and far more massive Lantern shows, lime-light was used for back-projections and lighting effects on the panoramic canvas. Finally – and most significantly – the "fiendish mirror" of Daguerre's captured light and used this 'natural' brush to etch upon a glass a permanent image of any scene. While the process employed by Daguerre turned out to be difficult to use at low temperatures, explorers-turned-amateur photographers soon found other processes, such as the Ambrotype and the Calotype, perfectly suited to their frigid subjects, and painters such as Bradford employed photographers to make studies for later reference. Sir John Franklin himself – looking a bit uncomfortable in his too-tight dress uniform - was captured in the prism of Richard Beard, the first British licensee of Daguerre's invention, leaving a final memorial etched in time long after his bones had gone to their icy grave.

As the century progressed, these visual technologies moved from the show-hall to the drawing room: lantern slide sets and stereoview collections were mass-produced for private consumption. The Arctic was a popular subject here as well, and ready-made sets of slides depicting every expedition from Kane's in 1853 onwards were commercially available. Some Arctic explorers, such as Isaac I. Hayes, even produced their own stereoview slides from original photographs, and one - Lieutenant Cheyne, a veteran of several Franklin search expeditions – produced a set of stereoviews of the Franklin relics, and ended his career as a traveling lantern showman giving an evening's program of Arctic views. The movement of scenes of the Frozen North from medium to medium, from era to era, both demonstrates and embodies the larger 'visual culture' which this book seeks to delineate, a culture in which a great many subjects – most particularly those that could *not* be seen in person – were apprehended primarily through visual media, or in such a way the "seeing" - however artificially enhanced and produced - was an increasingly central part of, and metaphor for, believing.ⁱⁱ Aided and abetted by an increasingly sophistical series of technologies – the panorama, the lantern slide, the photograph, the stereoview, the stereopticon – these spectacular visions, Arctic and otherwise, give us not only a sense of how these places were regarded, but of how Victorian society "saw" itself. This is particularly evident in the political dimension of many of these shows; the empire on which the sun never set deployed these new technologies to reaffirm its dominion over geographical space; seeing was not only *believing*, but in an important sense *possession* as well. As Jean-Louis Comolli put it in his foundational essay "Machines of the Visible," this new visual culture represented "a geographical extension of the field of the visible and the representable: by journeys, explorations, colonizations, the world becomes visible at the same time that it becomes appropriable."iii

In this regard, too, the Arctic was exemplary. The expeditions launched by the Admiralty in search of the Northwest Passage staked a great deal on the visual materials they brought back, and these materials in turn spurred the public interest that drove and justified further exploration. For each major expedition, an official representation had to be provided, both textually but visually. Of course, there was, almost always, a large folio volume, traditionally published by the firm of John Murray, and illustrated with large inserted plates based on sketches by expedition officers or naturalists. At several guineas the volume, however, these costly tomes reached far fewer people than did the popular books, magazines, and illustrated papers – which, along with gallery exhibits, panoramas, lantern shows, and other public spectacles brought views of those remote regions to a far broader public. Beginning with the Buchan expedition to the North Pole in 1818 (on which a young Sir John Franklin served as second officer), nearly every expedition licensed the sketches of its artistically-inclined officers to panorama exhibitors. In many cases, artist-officers such as Sir John Ross displayed their own paintings alongside those of professional artists, or oversaw the painting of panoramas so that they could later vouch for their accuracy.

The cross-section of the public which was drawn to such exhibitions transcended almost every line of social class, gender, and profession; from dukes and divines to domestics and dustmen, from poets such as Keats to journalists like Jerrold. Dickens, in his satirical account of "Mr. Booley's" visit to an 1850 panorama of an Arctic expedition, has him encountering

"... two Scotch gardeners; several English compositors, accompanied by their wives; three brass-founders from the neighbourhood of Long Acre, London; two coach-painters, a gold-beater and his only daughter, by trade a staymaker; and several other working-people from sundry parts of Great Britain who had conceived the extraordinary idea of 'holiday-making' in the frozen wilderness."^{iv} Such a varied social cross-section could hardly be found in any other venue, and gives a sense of how widely the demand for visual representations of exotic locales and strange sights was felt. Moving panoramas, their provincial audiences scattered about smaller towns such as "Brixton, Canterbury, Shrewsbury, Oswestry, Stafford, Nottingham, Grantham, and Peterborough" – this was the seasonal itinerary of just one Arctic moving panorama – reached a still more diverse crowd of tradesmen, artisans, farmers, and others who could only spare a few pence for the opportunity.

In addition to licensing their images to panorama showmen, expeditions from the 1840's onwards often permitted the illustrated papers to engrave views of their achievements. The Illustrated London News was of course the premier publication in this field, and published hundreds of views of the Arctic throughout the 1850's, but the entry of other graphic weeklies (The Illustrated News of the World, The Graphic) as well as illustrated papers in the United States (Frank Leslie's Illustrated Newspaper, Gleason's *Pictorial*) also coincided with the peak of interest in the Arctic. The very first issue of Leslie's, for instance, featured a full-page engraving of Dr. Kane's Franklin search expedition, based on an ambrotype made by Matthew Brady, later to become famous for his Civil War photographs. In addition to cutting plates for newspapers and magazines, popular engravers were kept busy making copies of panoramas, easel paintings, and exhibitions for use in programmes, handbills, and for sale as souvenirs. Walter Hartright, the art instructor who in Wilkie Collins's Woman in White sustains himself by making popular engravings, is in fact an exemplary figure for the times; that one could make one's entire living from such work marked the arrival of illustration as a professional possibility.

None of these 'new media' of the Victorian era, of course, diminished the importance of what have traditionally been regarded as the 'fine arts'; on the contrary, they offered new and highly significant means for the dissemination of the subjects of the great painters of the day, as well as a means of inculcation of the public into an understanding of art previously unavailable. Periodicals such as the Art-Journal gave their readers a broad view of both contemporary and historical art, and even panoramas and even stereoview slides were not beneath their notice and consideration. All of the papers, from the *Morning Chronicle* to the venerable *Times*, devoted considerable attention to the periodic exhibitions that dotted the calendar, and the illustrated papers often chose several paintings from each to engrave in their pages. In the process, public tastes were both formed and re-shaped, and artistic productions which in the past might have drawn modest crowds were re-cast as public spectacles. Paintings such as Church's "The Heart of the Andes" and "The Icebergs" became massive events attracting a far broader cross-section of society, and even disturbing subjects such as Landseer's carnivorous polar bears - which was pointedly snubbed by all the Arctic dignitaries of its day – could become popular successes.

The most notable collusion between visual technologies in the fine arts came through the work of artists, such as David Roberts and William Simpson, whose depictions of subjects such as the Holy Land and the Crimean war were among the most popular of their day, thanks to their dissemination as engravings and colored prints. The chromolithograph, an early color reproduction process, enabled prints to be made for home display which were nearly as vivid as the originals, as well as affordable to an emerging audience of middle-class collectors. Simpson, after his success in the Crimean, became almost a canvas journalist; when he was commissioned to make a view of the Arctic ship Resolute, he brought a photographer to take studies instead of a pencil. The resulting image was rapidly painted and engraved in a style that even viewers who were unaware of the means of its production compared with photography for its realism. Shortly after its completion, Simpson's "Resolute" embarked on a tour of the United States, with prints of varying degrees of quality and expense sold at the doors of each exhibition – a presentation which formed visual corollary to the United States' act of presenting the ship itself to Britain.

The parallel emergence of popular print, photography, and other graphical technologies thus enabled an unprecedented degree of communication between Great Britain and the United States, the two great national players upon the Arctic stage. Dr. Elisha Kent Kane, the most prominent American searcher for Franklin's lost men, owed his immense international fame in large part to this development. His dispatches from the Arctic were widely published on both sides of the Atlantic, and panoramas displaying his exploits moved readily from one country to the other, touting reviews from abroad as their greatest endorsements. Engravings based on his sketches filled the pages of the periodical press in both countries, flowing all the more freely due to the lack of anything resembling international copyright at the time. Indeed, Frank Leslie's Illustrated Newspaper had been founded in the U.S. by a former engraver for the Illustrated London News, and along with its rivals, frequently recycled or re-engraved images already published in Britain. Such developments, I argue, compel us to see the 1850's as the first era of international visual mass media, an indispensable prelude to the era of the photogravure and the wire-service photograph – and it was Arctic subjects which, well before the American Civil War, were among the first common images of this new era of mass media.

Then, as now, the media and its messages both altered, and in a sense, produced a new kind of viewer-readership, whose boundaries blurred all manner of old distinctions. An illustrated paper could convey some sense of news and the arts even to a non-literate person, and panoramas were frequently advertised as 'conveying more information in pictorial form than could be acquired by reading any number of books.'v One did not to be a connoisseur with a shelf of folio volumes and a private collection of art – the same images, the same information, and the same sense of a secured 'possession' of images and facts could be obtained by persons of very modest means. Through inexpensive newspapers, duodecimo 'popular' editions, and popular engravings (these last often inserted in the central fold of the newspapers themselves), the walls of the butcher and the baker might well contain as rich a panoply of scenery and science as those of the baronet. As strange as it may sound to our ears, the term 'mass medium' – quite pointedly applied to the panorama by scholars such as Stephan Oetterman - is an apt, and perhaps the only way to describe the visual culture of the period from the 1820's through the 1870's.vi That this was also the period of the most ambitious series of Arctic expeditions in European or American history cemented the subject as the quintessential scenery of the era. A house where images of the Frozen North could be hung upon the wall was clearly the house of a citizen of an important class, an important nation, and an important era.

This era, moreover, was on a most fundamental level a spectacular one. It would be no exaggeration to say that the public, both in Britain and the United States, was obsessed with these new means of visual production and consumption. Older visual media, such as the illustrated book or the easel painting, were not so much *supplanted* as supplemented – and as so often happens, the supplements themselves were continually resupplemented and rendered obsolete in their turn, both technically and aesthetically. This restless movement produced a vast marketplace of spectacles, each advertised with hyperbolic claims and counterclaims of scope and verisimilitude. As the period progressed, moving panoramas were claimed to be two, three, or even seven miles in length, were augmented "with a variety of chemical and mechanical apparati," were accompanied by orchestras, sound-effects, and lantern projections, and displayed in the company of wax figures, false scenery, automata, and living statues. Illustrated newspapers advertised not only the accuracy, size, and dramatic subjects of their illustrations, but the technical prowess of the steam-presses and 'thermionic engines" upon which they were printed, or the speed with which the news they contained had been transmitted around the globe. Lantern slides were thrown upon enormous screens, or shrunk to microscopic size where only a powerful lens could reveal their truth; photographic panoramas and panoramic photographs issued competing claims of unsurpassed vraisemblance.

In the twentieth century, critics such as Guy Debord have militated against what they have seen as a "society of the spectacle," in which "resemblance" and "truth" are blurred, even – for writers such as Jean Baudrillard – *reversed* in priority. Yet whatever the special relevance of this claim to the twentieth century, it clearly has its roots in the nineteenth. We tend to forget that many of the most spectacular technologies of today have their roots in this era: an early fax machine was demonstrated for Queen Victoria at the Great Exhibition in 1851; Babbage's analytical engine – the first true computer -made its debut in 1834; photographic lantern slides were developed in the 1850's; and by the 1880's early versions of motion pictures and even television were being developed. More significantly, the demands of one medium or technology prepared and often produced the market for the next: the fixed Panorama prepared the way for the moving panorama, which in turn prepared the way for early public cinema. The same class of traveling fairground proprietors who in the 1830's were showing moving panoramas were, by century's end, showing short "bioscope" films, while many of the vast circular buildings which once house fixed panoramas were converted for use as cinemas. That London's Leicester square, the birthplace of the panorama and often home to a halfdozen such shows in the 1850's, is now the greatest cinema showplace in the UK is no coincidence; the foundations of the Odeon were quite literally built atop of those of the old Royal Panopticon of Art and Science.

That the Arctic holds the place it did – and in many ways still does – in the public eye is very largely due to its place as the most "sublime and awful" spectacle of this already spectacular era. Between 1818 and 1883, no fewer than *sixty* Arctic shows – twenty-two moving panoramas, three fixed panoramas, a dozen lantern exhibitions, four mechanical automata theatres, and four exhibitions of "Esquimaux" or Arctic natives among them.^{vii} Later in the century, as such exhibitions gradually shifted in emphasis from large public venues to private home displays and parlor exhibitions, at least sixteen

different commercial sets of lantern slides, and well over four hundred stereoscopic views, were produced for home use as well. It's not just a case of parallel histories of exploration and exhibition, but of a deep cultural and geographical cathexis between new technologies of vision and the regions of the earth most difficult – and terrifying – to behold.

Yet even beyond giving a striking sense of the interrelatedness of exploration and visuality, this kind of study can offer a kind of archaeological glimpse, giving us some sense of the strata beneath our feet as we enter into a new era of technology and visual media. One cannot understand these new phenomena fully without knowing that, in many ways, the desires to which they appeal are hardly new ones. New modes of 360-degree views, such as the Quicktime VR system or the IMAX theater, have their corollaries in Barker's panorama and its cousins, while the sense we acquire that we have 'traveled' to distant places via the World Wide Web – though in fact we are sitting at home with a cup of coffee and a doughnut – is not unlike that which Dickens satirically imputes to his panorama-going "Mr. Booley,"

[whose] capacity of travelling, day and night, for thousands of miles, has never been approached by any traveller of whom we have any knowledge through the help of books. An intelligent Englishman may have occasionally pointed out to him objects and scenes of interest; but otherwise he has travelled alone and unattended. Though remarkable for personal cleanliness, he has carried no luggage; and his diet has been of the simplest kind. He has often found a biscuit, or a bun, sufficient for his support over a vast tract of country.^{viii}

That the British Arctic explorers whose adventures so captivated Booley (and Dickens as well) often perished from want of food, or were weakened by dragging overmuch "luggage," seems to me not a coincidence, but rather a *consequence* of the larger ideologies of empire which sustained both the physical and artistic labor involved in such "travel."

We are not, after all, the "first who ever burst" into those Arctic seas – and yet, in our desire to feel *as though* we were, we share with our nineteenth-century forebears almost an identical thirst for "realism" accomplished by "pictorial means." The North still draws us on by an attraction as "magnetical" to us as to them, and it remains one of the few regions on earth which merely to visit elevates one to a kind of spectacular status. When I traveled to the Arctic, visiting numerous sites associated with Franklin's last expedition, and even standing on the graves of the three sailors buried under the ice and rock of Beechey Island, my reaction was probably the same a would have been that of my Victorian antecedent: *it's just like being in pictures*. We may no longer be fooled by scrolling canvasses, nor jump – except in movies! – into chalk pavement-pictures, but we are as much enthralled by the *visual* sense of a reality other than our own as were those who did. And, as consumers in a potent new era of visual technologies, we neglect the study of these histories at our peril. ¹ Chauncey Loomis, "The Arctic Sublime," in U.C. Knoepfelmacher and G.B. Tennyson, *Nature and the Victorian Imagination* (Berkeley: University of California Press, 1977, pp. 95-112.

ⁱⁱ The development of a theory of "visual culture" in analyses of Victorian society has gained considerable ground in recent years. In particular, books such as Kate Flint's *The Victorians and the Visual Imagination* and Carol T. Christ and John O. Jordan's *Victorian Literature and the Victorian Visual Imagination* have embodied and advanced this approach. For an excellent collection with a broader chronology, see The Visual Culture Reader, ed. Nicholas Mirzoeff (NY: Routledge, 2002).

ⁱⁱⁱ Jean-Louis Comolli, "Machines of the Visible," in Theresa De Lauretis and Stephen Heath, eds., *The Cinematic Apparatus* (London: Macmillan, 1980), pp. 122-3.

^{iv} Charles Dickens, "Some Account of an Extraordinary Traveller," *Household Words*, April 20 1850, p. 76.

^v This encomium was so common that it was virtually a cliché of the trade; a particularly hyperbolic example, made in reference to Dr. Beale's Panorama of Kane's Arctic Voyages, is this from the *Newark Daily Advertiser* of May 7, 1858: "As a journey through a strange country, or a floating visit to a foreign land will afford one a better knowledge of its most important features than can be gained by the perusal of a dozen volumes, so will a visit to the exhibition of the Panorama of Dr. Kane's Voyage to the Arctic Regions furnish the beholder of the magnificent work of art a more useful and practical insight into the wonders and beauties of that mysterious region, than can all the written descriptions of the voyage of the bold navigator than have ever been penned."

^{vi} Stephan Oetterman, *The Panorama: History of a Mass Medium* (NY: Zone Books, 1997.

^{vii} For a full list, see the Appendix, "Arctic Shows and Entertainments." Due to the ephemeral nature of the evidence for many of these productions, the figure of sixty is almost certainly a low estimate.

viii Charles Dickens, op. cit., p. 73.