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For my mother
In memory of my father.

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Abstract

This dissertation is about the magic lantern and how it conveys meaning in a shifting media landscape. It focuses on the form, language, and style of lantern images and performances that circulated around 1900, a period of pronounced technological and cultural change that is considered a significant turn in media history. By *lantern image*, I mean the projected image, performed by live narration, music, sound effects, and projection itself. By *lantern performance*, I mean the concatenation of lantern images and the transitions between them given by a lanternist before an audience. Through close readings of a series of lantern comedies, melodramas, and spectacles that remain largely unknown, underexamined, or undertheorized, this dissertation demonstrates that the lantern actively participated in an aesthetic of media transition typically reserved for the then-new media, yet pertinent to the then-old. It argues that it is characterized by actively superposing layers of practices and its reciprocal interchanges with neighboring media and art forms. Each chapter explores this intertwining dynamic of superposition and reciprocity through the lantern's interaction with newer media and popular entertainments, locating their traces in the lantern's formal and stylistic features. I argue that the c. 1900 lantern offers a new way of thinking with and through the lantern: a frame that reveals and embraces the lantern's continuities, ruptures, and ambivalences while also serving as an invaluable tool for understanding our established and emerging mediascape.

Introduction

All on the Screen

THE MAGIC LANTERN.

> *The magic lantern has come to stay. It has been laughed out, voted out, gone out, come back, doubled, tripled, and dissolved. It has been furnished with mounted slides, colored slides, revolving slides, aquariums, electrical appliances, growing trees, salamander experiments, pulsation of heart-beats, flowering plants, rain and snow storms, hail, frosts, flowing streams, rolling seas, tossing ships, blue skies, night owls, sunbursts, ghosts, armies in battle, dying heroes, cities, countries, specters, clouds, stars, grottos, panoramas and cycloramas, all on the screen…*
>
> —McIntosh Battery and Optical Co.[1]

How enduring, flexible, and capacious the magic lantern was at the dawn of the twentieth century. Since its emergence in the 1650s, it had continuously increased its equipment, adapted itself to every possible situation, and extended its reach to audiences around the world. By 1895, when the above testimonial appeared in the McIntosh Battery and Optical Co. of Chicago's *Illustrated Catalogue*, the lantern was easily the most long-lived and wide-ranging of popular entertainments. For the professional lanternist, it was a source of unlimited, almost overwhelming possibility for producing original effects on the screen. For audiences, it was a pervasive form of amusement and edification, and for the author of the testimonial, it was a seemingly permanent feature of the media landscape. The lantern's staying power and promise stemmed from its ability to incorporate new material and practices into its repertoire— its potential for self-renewal. But today, when only a fraction of the lanterns, accessories, and slides

[1] McIntosh Battery & Optical Co., *Illustrated Catalogue of Stereopticons, Sciopticons, Dissolving View Apparatus, Microscopes, Solar Microscope and Stereopticon Combination Objectives, Transparencies, Plain and Artistically Colored Views and Microscopical Preparations* (Chicago: McIntosh Battery & Optical Co, 1895), 10.

offered in the McIntosh catalogue survive, when it is impossible to experience a historic lantern performance (and far from easy to see a contemporary one)., and when the lantern itself is often characterized, narrowly, as a precursor of the cinema, the modern slide projector, or the PowerPoint presentation, it is difficult to imagine it as a vibrant and diverse form of aesthetic and cultural expression in its own right.[2]

This is a study of the magic lantern and how it conveys meaning in a shifting media landscape. It focuses on form, style, and language in fictional lantern images and performances of the late nineteenth and early twentieth century, a period of pronounced technological and cultural change. By *lantern image*, I mean the projected image, performed by live narration, music, sound effects, and projection itself. By *lantern performance*, I mean the concatenation of lantern images and the transitions between them given by a lanternist before an audience. Through close readings of a series of lantern comedies, melodramas, and spectacles that remain largely unknown, underexamined, or underanalyzed, this dissertation provides a fresh approach to the study of the lantern while also offering a new perspective on the history of media change.

Why investigate these aspects of the lantern, and why now? To the first question, the lantern's formal and stylistic features in and around 1900 reveal a much more complex and diverse phenomenon than has been previously acknowledged. Throughout the long nineteenth century, the lantern both influenced and was influenced by the media, arts, and entertainments that surrounded it, such as (but far from limited to) panoramas, literature, painting, theatre,

[2] See Douglas Gomery and Claire Pafort-Overdiun, *Movie History: A Survey, Second Edition* (New York: Routledge, 2011),10; Charles Musser, *The Emergence of Cinema: The American Screen to 1907* (New York: Scribner's, 1990), 1; and André Gaudreault, "The Culture Broth and Froth of Cultures of So-called Early Cinema," in *A Companion to Early Cinema,* ed. Nicolas Dulac, André Gaudreault, and Santiago Hidalgo (Malden: Wiley-Blackwell, 2012), 20.

tableaux vivants, comics, and vaudeville. Decade by decade, it transposed popular entertainments to the screen and transformed them into its own idiom. In the process, it regularly added fresh material, accumulating layers of new hybrid practices while retaining the best of its tradition. Thus, the turn-of-the-century lantern reflects its reciprocal interchanges with older and newer media forms, including motion pictures. It therefore provides a helpful corrective to the time-honored, limited, and limiting view of the lantern as a pre-cinema artifact and of lantern performance as a prefiguration of the cinema.

The answer to "why now?" is threefold. First, the digital era has occasioned unprecedented access to an ever-increasing amount of lantern material. In addition to examining lanterns, slides, and ephemera held in private and institutional collections, we can now consult a wide range of digitized primary sources online, such as lantern slides, lantern catalogues, manuals, readings, and trade journals. Moreover, thanks to digital initiatives like the Lucerna Magic Lantern Web Resource, which at the time of writing encompasses nearly 150,000 individual slides, it is now possible to paint a much more nuanced picture of the history of a given slide set by connecting it to information about manufacturers, people, organizations, locations, hardware, and events. [3]

Secondly, digital technology has enabled a number of new modes of lantern analysis. While researchers have long been able to examine lantern slides on light boxes or as

[3] The Lucerna database was launched at the "Screen Culture and the Social Question" conference in London in December 2011 and has since proven indispensable for researching the lantern in its historical and social contexts. See Richard Crangle, "The Lucerna Magic Lantern Web Resource" in *Screen Culture and the Social Question, 1880-1914*, ed. Ludwig Vogl-Bienek and Richard Crangle (New Barnet: John Libbey, 2014), 191–202. For a discussion of Lucerna's usefulness in identifying and evaluating commercial slide series, see Sarah Dellmann, "Beyond and with the Object: Assessing the Dissemination Range of Lantern Slides and their Imagery, *Early Popular Visual Culture* 14, no. 4 (2016): 340–58.

photographic reproductions in books, we are now able to work with digitized slides on computer monitors, where the possibilities for arrangement and manipulation are nearly limitless. As a result, we can study tiny details in a given lantern slide, trace the development of a lantern genre, and explore stylistic differences among lantern slide manufacturers. Further, with the aid of digital projectors and presentation applications such as PowerPoint and Keynote, we can examine lantern slide sets as they were designed to be seen, displayed sequentially on a screen. In other words, we can conduct a close analysis on lantern images and performances.

Finally, the lantern has taken on new relevance in the context of our current moment. In light of the digital turn, historians have become invested in reevaluating our media past. Early cinema, as both a continuation of older traditions and the beginning of new practices, has become a salient point of reference for understanding our contemporary mediascape. The project of historicizing media change, I believe, has opened up new routes of inquiry into the lantern. Now, the turn-of-the-century lantern can be invoked to revise teleological understandings of the lantern-film relation, rethink distinctions between old and new media, and reconsider how we continue to (re)write our media history. It may even help us to reimagine the future of the projected image. In this moment, then, the c.1900 lantern—the lantern that had "come to stay"—demands and deserves our closest attention.

C. 1900

In 1900, the magic lantern was an old medium—indeed, very old. It was entering its third century. As an optical device for the projection of still and moving images, it had emerged in mid-seventeenth-century Holland among an ensemble of scientific instruments. Between its early decades and the 1890s, its dual function of entertainment and instruction, and its basic

apparatus—the lantern body, illuminant, chimney, condensing and objective lenses, slide stage, slides, and projection surface—remained relatively stable. At the same time, inspired by the ever-changing demands and desires of a varied public, its technological and cultural scope expanded greatly: illuminants became brighter, lenses became more powerful, slides became mechanized and mechanically reproduced, optical systems multiplied, practices became more varied and complex, venues diversified, and the medium became mass.[4]

In 1900, lantern historiography was a relatively new trend, a late-nineteenth-century phenomenon. One of its early contributors was the noted lanternist and lecturer, Thomas Cradock Hepworth, who in 1898 wrote a pair of articles celebrating the lantern's achievements in scientific demonstration and its latest contribution to posterity: the films of Queen Victoria's Diamond Jubilee. In "The Evolution of the Magic-Lantern," Hepworth traces the lantern's development from the "toy" in Athanasius Kircher's *Ars magna lucis et umbrae* (1646) to the modern magic (or "optical") lantern through such mid-nineteenth-century technological developments as limelight, dissolving views, and photography.[5] His second article, "Living Photographs," the latest employments of the optical lantern, describes the evolution from another toy, the thaumatrope, to motion pictures by way of the zoetrope, chronophotography, and the kinetoscope.[6] Several months later, Hepworth produced a third article, "Film Photography," which likewise focuses on a few developments made at different periods that marked important

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[4] For a brief overview of the history of the lantern, see David Robinson, introduction to *The Lantern Image: Iconography of the Magic Lantern 1420-1880*, ed. David Robinson (London: Magic Lantern Society, 1993), 6–11.

[5] T. C. Hepworth, "The Evolution of the Magic-Lantern," *Chambers Journal*, 6th Series, vol. 1 (March 5, 1898): 213–15.

[6] T. C. Hepworth, "Living Photographs" *Chambers Journal*, 6th Series, vol. 1 (March 12, 1898): 228–231.

next steps: the daguerreotype, wet and dry plate processes, and celluloid.[7]

Thus, in 1900, the lantern, nearly ubiquitous and alive with the scientific spirit of the age, had already inadvertently written itself into cinema's prehistory. Although "living pictures" were initially seen as an extension of the lantern,[8] the narratives in Hepworth's tripartite series soon merged into a master narrative of cinema's invention as a result of improvements on pre-existing technologies—including the lantern itself—which ultimately formed the basis of early film histories.[9] So, for instance, in Terry Ramsaye's *A Million and One Nights: A History of the Motion Picture* (1926), we find the lantern "striving" imperfectly "after literal motion recreations of events" as it projects a looping Phantascope sequence of a waltz at the Philadelphia Academy of Music in 1870. [10] We find the lantern lodged firmly in a linear account of the development of motion pictures.

This dissertation is invested in upending the teleological assumptions that have plagued the lantern since their inscription into early lantern and film histories. These are based on familiar and well-rehearsed narratives about the successive technological developments and canonical performances that led to the emergence of cinema. Contrary to received opinion, the lantern did not aspire to cinematography's goal of reproducing photographically on the screen

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[7] T. C. Hepworth, "Film Photography" *Chambers Journal* 6th Series, vol. 1 (June 11, 1898): 437–39.

[8] See, for instance, Henry V. Hopwood, *Living Pictures: Their History, Photoduplication, and Practical Working* (London: Optician and Photographic Traces Review, 1899), 3: "A film for projecting a living picture is nothing more, after all, than a multiple lantern slide."

[9] For an overview of early British film historiography see Simon Popple, "'Cinema wasn't Invented, It Growed': Technological Film Historiography before 1913," in *Celebrating 1895: The Centenary of Cinema*, ed. John Fullterton (London: John LIbbey, 1998), 19–26.

[10] Terry Ramsaye, *A Million and One Nights: A History of the Motion Picture* (New York: Simon and Schuster, 1926), 7.

the continuous movements of people and objects—nor did it anticipate cinema, as if such a single homogeneous phenomenon ever existed. The lantern's aim, as implied by Hepworth's account of its popularization in the Victorian era, was to continue expanding its range of application, expression, and cultural influence.

Up to now, there have been two main approaches to the history of the magic lantern. The first deals with lantern history proper. Over the years, such scholars as Franz Paul Liesegang, Olive Cook, John Barnes, Hermann and Ann Hecht, David Robinson, X. Theodore Barber, and Deac Rossell, among others, have conducted in-depth research on various aspects of the lantern as a transcultural and transhistorical phenomenon. For instance, Barber's dissertation on the history of the American lantern show from the 1740s to 1896 draws on a variety of primary sources, including newspaper reviews and broadsides, weaving the lantern's social and cultural contexts, slide subjects, performance practices, technology, and manufacture into a rich tapestry. Hecht's *Pre-Cinema History* and Robinson et al.'s *Encyclopaedia of the Magic Lantern*, which adopts a fragmentary approach that affords multiple points of connection, are remarkable in their scope and precision and indispensable for research on the lantern and its related forms.[11] Taken together, these studies have provided a much more detailed and dynamic picture of the lantern's technological and cultural history.

The second approach situates the lantern within a longer history of the moving and projected image. For example, Laurent Mannoni's *The Great Art of Light and Shadow: Archaeology of the Cinema*, a study of optical media from the twelfth to the twentieth centuries, adds considerable color and depth to the lantern's international history. Mannoni provides

[11] Hermann Hecht, *Pre-Cinema History: An Encyclopedia and Annotated Bibliography of the Moving Image Before 1896*, ed. Ann Hecht (London: Bowker Saur, 1993).

detailed case studies of the Dutch polymath, Christiaan Huygens (the "inventor" of the lantern), the Belgian showman, Étienne-Gaspard Robertson and his phantasmagoria, Englishman John Henry Pepper's Ghost at the Royal Polytechnic, and the mass production and distribution of lanterns and slides by Molteni, Liesegang, and Newton in Germany and England, respectively.[12] It thus unites motion pictures to a broader cultural history of showmen, craftsmen, and audiences as well as technologies.

Similarly, in his book on the first twelve years of American cinema (1895-1907), Charles Musser's first chapter, "Toward a History of Screen Practice" demonstrates the continuity between magic lantern traditions and early cinema by way of his important framework of "screen practice."[13] Centering on the role of the exhibitor, Musser examines the history of projected images with audio accompaniment from Kircher's catropic lamp in the mid-1600s to Thomas Alva Edison and William Kennedy Laurie Dickson's motion pictures in the 1890s. His conception of a history of the screen reframes cinema as part of a longer tradition in which transformations take place regularly in tandem with cultural change. In doing so, it breaks down artificial distinctions between the invention of motion pictures, the development of editing and other techniques, and the arrival of cinema as a mature art form. It also provides a means of analyzing early film's borrowings from other aesthetic and cultural forms.

But if the *longue durée* account of screen history solves the problem of assigning a starting point for the invention of cinema, as Musser correctly points out, where does that leave the lantern? All "from … to histories" must end somewhere, and for most histories of the

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[12] Laurent Mannoni, *The Great Art of Light and Shadow: Archaeology of the Cinema*, trans. and ed. Richard Crangle (Exeter: University of Exeter Press, 2000).

[13] Musser, *Emergence*, 15-54.

lantern—whether dedicated to the lantern in its own right or to the archaeology of cinema—the "to" is the emergence of motion pictures, itself characterized as the "culmination" or "apotheosis" of several centuries of lantern work, and the "death-knell' for the lantern. They end with an explicitly or implicitly articulated telos, suggesting, as Thomas Elsaesser argues, that teleology is an inevitable consequence of adopting a linear model of media development.[14]

This dissertation begins—or rather, revolves—elsewhere, around 1900. As with *Film 1900: Technology, Perception, Culture*, "1900" does not refer to the calendar year, but to the "significant turn in media history" that took place at the turn of the last century.[15] Like Lynda Nead's *The Haunted Gallery: Painting, Photography, Film C. 1900*, it is set in the landscape of *fin-de-siècle* popular visual culture.[16] And like Walter Benjamin's *Berlin Childhood around 1900*, it is more concerned with portraiture than narrative, with simultaneity rather than linearity.[17]

In positioning the lantern in the turn-of-the-century mediascape, my study touches on two key simultaneities. The first has to do with the lantern's external relations with other media forms, its involvement in what Ian Christie calls an "ensemble of visual media."[18] Throughout its

[14] Thomas Elsaesser, "*The New Film History as Media Archaeology*," *Cinémas* 14, nos. 2–3 (2004): 93.

[15] Annemone Ligensa, "Introduction: Triangulating a Turn: Film 1900 as Technology, Perception and Culture," in *Film 1900: Technology, Perception, Culture*, ed. Annemone Ligensa and Klaus Kreimeier (New Barnet: John Libbey, 2009), 1–7.

[16] Lynda Nead, *The Haunted Gallery: Painting, Photography, Film C. 1900* (New Haven: Yale University Press, 2007).

[17] Walter Benjamin, *Berlin Childhood around 1900*, trans. and ed. Howard Eiland (Cambridge: Harvard University Press, 2006).

[18] Ian Christie, "Moving-Picture Media and Modernity: Taking Intermediate and Ephemeral Forms Seriously," *Comparative Critical Studies* 6, no. 3 (2009): 299–318.

history, the lantern enjoyed frequent interchanges with the media with which it coexisted. In the early-to-mid-nineteenth century, for instance, it was shaped by its interactions with a number of forms, such as moving panoramas, dioramas, orreries, and other public exhibitions described in vivid detail in Richard Altick's seminal study, *The Shows of London*.[19] The c. 1900 lantern was likewise influenced by its exchanges with members of its contemporary network, such as the kinetoscope, music hall, and other contemporary forms of optical media and entertainment.

The second simultaneity has to do with the lantern's internal stock of practices, its repertoire. As an accumulative medium, or a medium of actively superposed layers, the lantern didn't shelve old material when it added new material. When photographic lantern slides were introduced by William and Frederick Langenheim at the 1851 Crystal Palace Exhibition in London, for instance, they did not supersede painted slides, as the Langeheims themselves claimed they would. [20] Rather, they were incorporated into the lantern's ever-expanding image repertoire, and the two formats coexisted for decades. Indeed, in 1920, the British slide manufacturer, Newton & Co. offered nearly every kind of slide sold by the firm since its founding in the mid-nineteenth century, from hand-painted subjects to three-color photography. Thus old and new images enjoyed a simultaneous screen life.

Therefore, in some ways this study could revolve around another year, given that it would also reflect the lantern's cumulative layers and cross-media exchanges. However, c. 1900 is hardly chosen at random. While the period isn't considered particularly significant in traditional lantern histories—it has been characterized, variously, as a few years after the lantern's heyday,

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[19] Richard D. Altick, *The Shows of London* (Cambridge: Harvard University Press, 1978).

[20] Musser, *Emergence*, 30.

a few years into its obsolescence, somewhere in the middle of its golden age, and a good half a century away from its discontinuance and subsequent reemergence in "modern magic lantern shows"—it is when the lantern is drawing on an especially wide array of old and new practices.[21] On the one hand, comic slipping slides (c.1840s) are still providing comic relief in mixed bills, and the Pepper's ghost illusion (c. 1860s) is employed by stage magicians in such exhibitions as "*Cabaret du Neant*" (or "Tavern of the Dead").[22] On the other hand, state-of-the-art double scyopticons are producing electro-mechanical flying butterfly effects in Loie Fuller's European tour, and a battery of powerful lanterns are transporting Dorothy, her house, and Imogen the cow from Kansas to the Munchkin Country in the 1902–1903 musical extravaganza, *The Wizard of Oz*.

C. 1900 is a period when the lantern is full of continuities, contrasts, and contradictions, much like the motion pictures with which it co-occupies the screen. It is also when, according to Tom Gunning, motion pictures show the strongest symbiosis with the lantern and other popular entertainments.[23] Indeed, for Gunning, the "apparent stylistic anomalies," which are characteristic of the cinema of attractions and that signal its otherness or paradigmatic difference from classical film narration, arise from early film's symbiotic relation with lantern series, vaudeville, and comics. Inspired by Gunning's insights regarding early film's "non-continuous style," this study focuses on a series of stylistic lantern anomalies in fictional lantern

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[21] *Encyclopaedia of the Magic Lantern*, ed. David Robinson, Stephen Herbert, and Richard Crangle (London: Magic Lantern Society, 2001), 196.

[22] Albert A. Hopkins, *Magic: Stage Illusions and Scientific Diversions, Including Trick Photography* (London: Low, 1897), 55.

[23] Tom Gunning, "The Non-Continuous Style of Early Film (1900-1906)," in *Cinema 1900-1906: An Analytical Study*, ed. Roger Holman (Bruxelles: FIAF, 1982), 220.

performances—marked departures from its established modes of representation—that arise from the lantern's symbiosis with motion pictures and other turn-of-the-century forms. Taken together, they show the lantern's movement toward new possibilities, as well as its exploration of some of them in concrete terms.

Thus, while this dissertation doesn't have specific starting and finishing points, it doesn't jettison them in order to avoid beginnings and endings. Historical parameters and chronological organization allow us to track continuities and transformations in modes of production, distribution, and exhibition and relate them to the lantern's representational processes, asking, following Kristin Thompson and David Bordwell, "What would a non-linear history of the lantern look like?" [24] By situating my study in and around 1900, I intend to complement diachronic approaches to screen history with a synchronic one in which early film is neither a telos nor a cut off, but an asset: a sister form that sheds important light on the lantern's internal and external dynamics. And by investigating the older lantern's symbiotic relations with newer forms during the years surrounding the emergence of motion pictures, I hope to develop an alternative conception of the lantern.

When Old Media were Old

It has become a commonplace among media historians that new media do not appear out of thin air (though they often possess a certain magic), but rather emerge within the context of existing technologies, traditions, and practices. Thus, when media were new (as all media once were) their roles were far from clear-cut. In her important study of "electric communication," *When*

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[24] Kristin Thompson and David Bordwell, "Linearity, Materialism, and the Study of Early American Film," *Wide Angle* 5, no. 3 (1983): 4-15; Frank Gray, "Engaging with the Magic Lantern's History," in *Screen Culture and the Social Question 1880-1914*, 172–80.

Old Technologies Were New, Carolyn Marvin argues that emerging media undergo a series of complex and varied processes before their practices are standardized. Their functions, she shows, are not determined by their technologies, but rather are formed over time by their social uses.[25] More recently, in light of emerging digital media technologies, cinema and media scholars have conceived media emergence, variously, as a crisis of multiple identities: the first of multiple "births;" a process of convergence, whereby existing media content flows into new media; and as the remediation or refashioning of previously existing media.[26]

Another commonplace, and a corollary to the above, is that existing media do not disappear right away. Rather, they undergo a period of obsolescence during which they are "forced to co-exist with the emerging media."[27] According to Henry Jenkins and David Thorburn, "Old media rarely die; their original functions are adapted and absorbed by newer media; and they themselves may mutate into new cultural niches and new purposes."[28] Such accounts aim to replace models of media supersession— where newer forms abruptly displace existing media, undertake their functions, and relegate them to storage spaces—with a more complex understanding of media change as an irregular and gradual process of transformation.

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[25] Carolyn Marvin, *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century* (New York: Oxford University Press, 1988), 5.

[26] See Rick Altman, "Crisis Historiography" in *Silent Film Sound* (New York: Columbia University Press, 2004), 15–23; André Gaudreault and Philippe Marion, "A Medium is Always Born Twice…," *Early Popular Visual Culture* 3, no. 1 (May 2005): 3–15; Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York University Press, 2006); and Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, MA: MIT Press, 1999).

[27] Jenkins, *Convergence*, 14.

[28] David Thorburn and Henry Jenkins, "Introduction: Towards an Aesthetics of Transition," in *Rethinking Media Change: The Aesthetics of Transition*, ed. David Thorburn and Henry Jenkins (Cambridge, MA: MIT Press, 2003), 1–16.

However, they often carry subtle teleological assumptions about the older forms in the process. So, in the same text Jenkins and Thorburn also state: “If movies were in some sense replicating earlier media, those ancestor systems were also aiming imperfectly and incompletely to satisfy expectations that would ultimately give rise to the cinema.”[29] In the *pas de deux* between existing and emerging media, the former are characterized as the lifters and supporters: the examples to be imitated, the features of the environment to be entered, the forms to be remediated, and the content that converges.

For older media, then, these more nuanced accounts of media transition simply soften the ultimate blow of supersession, particularly if media are understood, as William Uricchio puts it, as “mere technologies, institutions, and texts” rather than as the “cultural practices which envelope these and other elements within a broader fabric offered by particular social orders, mentalities, and the lived experiences of their producers and users.”[30] Examining the historical specificity of media during earlier moments of pronounced change and instability, Uricchio has shown that both older and newer forms are always in a state of multifaceted transition. Specificity is also key for Lisa Gitelman, who argues that media are in an ongoing state of flux, and, in order to avoid being essentialized or lumped together, need to be studied in terms of their interrelated social protocols and technologies rather than their overarching identity: “Media, it should be clear, are very particular sites for very particular, importantly social as well as

[29] Thorburn and Jenkins, “Towards and Aesthetics of Transition,” 11.

[30] William Uricchio, “Historicizing Media in Transition,” in *Rethinking Media Change*, 24.

culturally specific experiences of meaning."[31] Accordingly, it is better to specify "the lantern in late nineteenth-century Britain" than "the lantern."

This study is invested in complementing Marvin's, Uricchio's, and Gitelman's project of historicizing new media by reexamining the status of old media when they were old. Where is the lantern's place in what Rick Altman has described as "a complex web of constantly changing relationships among representational technologies"?[32] How does it negotiate the period of rapid technological and cultural change that characterizes the turn of the twentieth century? What can it tell us about our present media landscape and its possible futures? To explore these questions, this study excavates the c. 1900 lantern's overlooked interactions with such newer forms as motion pictures, late nineteenth-century stage melodrama, and electric light. Through close analysis and deep contextualization of jointly produced motion picture and lantern comedies, dramatic Life Model tableaux, and spectacular lantern stage effects, it illuminates how the lantern actively engaged in processes of imitation, experimentation, remediation, and transformation. I then argue that the lantern actively participated in the "aesthetics of transition" typically reserved for the then-new media, yet pertinent to the then-old.

As a study of the lantern during the period of its presumed obsolescence, this dissertation seeks to contribute to discussions of media change. By excavating a series of practices—or "seemingly forgotten moments in the history of the media we glibly call 'old'," as Wendy Hui Kyong Chun and Thomas Keenan put it—that show the lantern's transformations vis-à-vis

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[31] Lisa Gitelman, *Always Already New: Media, History and the Data of Culture* (Cambridge, MA: MIT Press, 2008), 8.

[32] Rick Altman,"Representational Technologies and the History of Cinema," *Iris* 2, no. 2 (1984): 124.

emergent media, it seeks to unsettle notions of media oldness and newness.[33] For intermediality, convergence, and remediation do not adequately account for the lantern's capacity for self-reinvention. My research complicates these conceptions by demonstrating that, in addition to providing material for the cross-medial borrowings by newer media, the turn-of-the-century lantern explores new forms of cross-pollination with contemporary entertainments. In addition to being put to "new purposes," such as the projection of titles, advertisements, management announcements, and coming attractions in movie theatres, it is renewed by its interaction with the new medium of electric light. In addition to being refashioned by early film, it experiments with new ways of representing space and time.

Indeed, the c. 1900 lantern is the very mirror image of cinema as "both a continuation of the old and the start of something new,"[34] and as such, demands to be included in conversations that seek (following Thomas Elsaesser) to "understand what the episteme 1900 and the episteme 2000 have in common," and to thus revise previous ideas about cinema and media.[35] What this dissertation ultimately offers, then, is a rethinking of the relationship between the late lantern and early film specifically, and old-new media relations more generally. Models of supercession and causality are thus replaced with models of *superposition* and *reciprocity*.

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[33] Wendy Hui Kyong Chun and Thomas Keenan, "Introduction: Did Someone Say New Media?" in *New Media, Old Media: A History and Theory Reader*, ed. Wendy Hui Kyong Chun and Thomas Keenan (New York: Routledge, 2006), 9.

[34] Thomas Elsaesser, "Is Nothing New? Turn-of-the-Century Epistemes in Film History," in *A Companion to Early Cinema*, ed. André Gaudreault, Nicolas Dulac, and Santiago Hidalgo (Malden, MA: Wiley-Blackwell, 2012), 605.

[35] Thomas Elsaesser, "Between Knowing and Believing: The Cinematic Dispositive after Cinema," in *Cine-Dispositives: Essays in Epistemology Across Media,* ed. François Albera and Maria Tortajada (Amsterdam: Amsterdam University Press, 2015), 70.

From Lantern Studies to Lanternology

By curious coincidence, what we might call lantern studies emerged around the same time as the "New Film History" variety of early cinema studies. In April 1978, a few weeks before the symposium *Early Cinema 1900-1906* at the FIAF Congress in Brighton, the Magic Lantern Society of Great Britain (since rechristened the Magic Lantern Society) began publishing *The New Magic Lantern Journal* (1978–2014). An organization of collectors, performers and enthusiasts, the Society was formed a year earlier "with the aim of encouraging the conservation of lantern material and research into its background."[36] The inaugural volume of the journal, which also served as a catalogue for the Magic Lantern Exhibition at the Architectural Society in London, provided a wealth of resources for further study, including new and archival articles, excerpts from Hepworth's *The Book of the Lantern* (1889), a glossary, and "An Incomplete Bibliography." Society members have produced a wealth of historical research of ongoing value to scholars, representing what can be considered the first phase of organized study of the lantern.[37] These have appeared in subsequent volumes of the *NMLJ*, and its successor, *The Magic Lantern* (2014–present), as well as *The Magic Lantern Gazette* (1989–present) and other MLS publications (such as the collection of essays, *Realms of Light)*.

The second phase, involving a wider group of archivists and scholars as well as collectors and performers, has generated such projects as *Screen Culture and the Social Question*, *1880-1914*, a critical investigation of the relation between early media and social history, and the

[36] Tony Dugdale, "Introduction and Editorial," *The New Magic Lantern Journal* 1, no. 1 (April 1978): 1.

[37] Richard Crangle, Mervyn Heard, and Ine van Dooren, eds. *Realms of Light: Uses and Perceptions of the Magic Lantern from the 17th to the 21st Century* (London: Magic Lantern Society, 2005).

aforementioned Lucerna Magic Lantern Web Resource.[38] The third phase is a relatively new discourse of scholars, which approaches the lantern as an "'open medium,' underlining its intersections with institutional and performative practices, as well as other media," which enables the tracking and reconsideration of "its pervasive presence across countless cultural locations, from the fairground to the schoolroom."[39] Through such current international initiatives as "A Million Pictures" (2015–18), "Heritage in the Limelight" (2016–19), "B-Magic" (2018–22), and others, the study of the lantern is expanding across multiple disciplines, diverse projects, and international contexts.

What I call *lanternology* is both alternative and complementary to this mainline approach. Whereas lantern studies seeks to fill in more gaps in our knowledge about the history of the lantern, lanternology aims to mobilize the lantern to challenge linear and evolutionary models of media history. Whereas lantern studies links lantern artifacts with "broader networks of influence," lanternology locates traces of broader influences in lantern style and situates them critically.[40] Whereas lantern studies is invested in discovering dominant patterns in lantern production, distribution, and exhibition, lanternology depends on the excavation and close reading of a small group of anomalous lantern practices, which taken together, lead us down a very different path than that of traditional histories. Indeed, during the turn-of-the-century period that is the focus of this study, rather than plateauing during its heyday, entering a period of decline, and becoming obsolete, the lantern explores new avenues for experimentation,

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[38] Richard Crangle and Ludvig Vogl-Bienek, eds. *Screen Culture and the Social Question*, *1880-1914* (New Barnet: John Libbey Publishing, 2013).

[39] Joe Kember, "The Magic Lantern: Open Medium," *Early Popular Visual Culture* 17, no. 1 (2019), 5.

[40] Joe Kember, "Lantern Mobilities," *Early Popular Visual Culture* 17, nos. 3-4 (2019): 227.

expansion, and reinvention. Rather than merely influencing newer entertainments, it is also influenced by them. And rather than anticipating cinema, it abounds in its own expressive means and demands that we evaluate it on its own terms—for its own sophistication and difference—year by year, and case by case.

Thus, while indebted to earlier and ongoing research projects on the magic lantern, this study is more aligned with the field of early cinema and the historiographic methods developed since the Brighton conference, particularly its engagement with primary source material; focus on the interplay between context, style, and technology; and unique blend of history, theory, and practice.[41] The New Film History's reconceptualization of early cinema and subsequent reappraisal of other popular turn-of-the-century entertainments has been a guiding light for my project.[42]

Charting a new course for the study of the lantern necessarily involves drawing on a number of methods and approaches, many of which are encompassed by the field of media archaeology.[43] Like Siegfried Zielinski's variantology, this study conceives the lantern as a phenomenon with multiple and uneven layers and seeks to excavate and reactivate the "dynamic moments in the media-archaeological record that abound and revel in heterogeneity" and deviate

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[41] See, for instance, *Early Cinema: Space, Frame Narrative*, ed. Thomas Elsaesser, with Adam Barker (London: BFI Publishing, 1990), which anthologizes nearly thirty essays published between 1978 and 1988 in such journals as *Cinema Journal*, *Iris*, *Screen*, *Cinetracts*, *QRFS*, *Wide Angle*, *Sight & Sound,* and *Framework*.

[42] André Gaudreault and Tom Gunning, "Early Cinema as a Challenge to Film History," in *The Cinema of Attractions Reloaded*, ed. Wanda Strauven (Amsterdam: Amsterdam University Press, 2006).

[43] See Erkki Huhtamo and Jussi Parikka,"An Archaeology of Media Archaeology," in *Media Archaeology: Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (Berkeley: University of California Press, 2011), 1–21.

from canonized narratives.[44] In keeping with Erkki Huhtamo's focus on recurring topoi in media culture, it attends to cyclical phenomena in lantern history and analyzes their "trajectories and transformations" and the continuities and ruptures highlighted by them.[45] And following Thomas Elsaesser, it seeks to explore the heuristic value of late-nineteenth-century media in light of our current moment.[46] If "history," as Wanda Strauven reminds us, "is not only the study of the past, but also of the (potential) present and the possible futures," this investigation likewise attempts to illuminate possibilities in our contemporary and future mediascape and offers a new appreciation of the c.1900 lantern itself.[47]

My approach also resonates with what Vivian Sobchack calls media archaeology's "particular concern with the past and the conditions under which it can be re-presenced."[48] Because lantern slides only live in projection and lantern narration is only produced on the screen—within and between the images—I have relied on a number of practical methods to recover and "re-presence" the lantern's previously unknown or overlooked performances. This dissertation has been enormously aided by my experience with organizing modern lantern shows, which has provided insights into everything from the technical setup of the lantern to the

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[44] Siegfried Zielinski, *Deep Time of the Media: Toward an Archaeology of Seeing and Hearing by Technical Means* (Cambridge, MA: MIT Press, 2006), 11.

[45] Erkki Huhtamo, "Dismantling the Fairy Engine: Media Archaeology as Topos Study," in *Media Archaeology,* ed. Erkki Huhtamo and Jussi Parikka, 28.

[46] Elsaesser, "Is Nothing New?," 591.

[47] Wanda Strauven, "Media Archaeology: Where Film Studies, Media Art and New Media (Can) Meet" in *Preserving and Exhibiting Media Art: Challenges and Perspectives*, ed. Julia Noordegraff, Vinzenz Hediger, Cosetta G. Saba, and Barbara Le Maître (Amsterdam: Amsterdam University Press, 2013), 68.

[48] Vivian Sobchack, "Afterword: Media Archaeology and Re-Presencing the Past," in *Media Archaelogy*, ed. Erkki Huhtamo and Jussi Parikka, 323.

management of a successful exhibition to the kinds of aesthetic experiences it can offer. It has also greatly benefitted from the inspection of archival materials, the digitization of lantern slides, and the reconstruction of lantern performances, all of which have facilitated the detailed study of the lantern's formal features, which I understand to be inextricably linked to content and social purpose.

Indeed, even as this study values and relies on a close analysis of the c.1900 lantern's stylistic practices, it also draws on comparative and cultural methods. The specificity of the lantern during any given period arises from its reciprocal interchanges with other forms and the combined desires of manufacturers, lanternists, and audiences. In other words, while the late lantern possesses a distinct technology, its identity as an aesthetic and a cultural form—a screen practice—is always already hybrid, impure, and historically specific and must be treated as such. At the end of the day, lantern specificity is case specificity.

Accordingly, this dissertation is divided into three chapters, each of which employs a case study to amplify the themes outlined above. Chapter 1 examines the symbiotic relationship between the c. 1900 lantern and early film by way of a corpus of previously unknown comic *lantern-film productions*: lantern slide series and motion pictures of the same events, shot by the same crew at the same location. It focuses on a range of stylistic anomalies, or departures from established modes of lantern production and representation, which reflect the interchanges between the two forms: the influence of motion pictures upon the lantern and vice versa. The lantern's experiments are considered in relation to continuity and rupture, and an argument is made for superposition and reciprocity as new models for lantern history.

Chapter 2 continues the examination begun in chapter 1 of the turn-of-the-century lantern's cross-medial exchanges with contemporary forms. This chapter explores the relation

between the lantern and theatre by way of the dramatic tableau and the tableau vivant. It centers on the style of the Life Model melodrama, *Enoch Arden*, and argues that its departures from other treatments of the dramatic poem and the tableau style of lantern narrative itself reflect a shift in standards from the narrative pictorialism that dominated most of the nineteenth century to the naturalist and realist aesthetics that began to influence theatre in the 1880s. It also deals with the question of media specificity, particularly as it colors classic debates in stage-screen relations and offers a third way of evaluating the lantern on a case-by-case basis.

Chapter 3 considers the lantern's dynamics of superposition and reciprocity vis-à-vis its collaboration with the emerging medium of electric light in the late nineteenth and early twentieth centuries. The chapter demonstrates how the electric illuminants that came into general use as an alternative to gaslight and limelight were a source of new mimetic power and reinvention for the lantern. The case examined, *A Trip to the Moon*, a lecture-performance depicting an imagined journey to the moon and back through a series of moving pictures of terrestrial and celestial phenomena, illustrates how the lantern harnessed electric light to mobilize new viewing positions and epistemes. In turn, as the chapter shows, electric light endowed the lantern with a new range of expression and experimentation, expanding its sites of exhibition from the lecture hall and legitimate stage to amusement parks and world's fairs, where it began to break down the division between images and spectatorial space.

Each of my case studies thus advances a *lanternological* approach that not only liberates the lantern from evolutionary accounts of technological progress but also mobilizes it to rethink a number of oppositions that have informed conventional modes of media-historical inquiry. The first chapter considers lantern-film production in terms of both continuity and discontinuity, the second regards Life Model tableaux in connection with both specificity and openness, and the

third considers electro-mechanical lantern scenes in terms of both oldness and newness. Together they make a case for the old lantern as a new site for exploring the relations between aesthetics, technology, and culture.

Chapter 1

Of Mischievous Boys, Tramps, and Lantern-Film Production

Scenes from a Park Bench

West Yorkshire, England, summer 1899 (date uncertain). A small group of people have gathered in a park to photograph a short comedy. The scenario they are shooting revolves around a familiar gag: A nursemaid, taking her charge for a walk in the park, places the baby carriage beside a bench, sits down, and starts to read a book. A policeman arrives, woos the nurse, and they stroll away, leaving the baby unattended. A tramp, who has been spying on the situation from a nearby hiding place, darts to the carriage, steals the baby's bottle, and drinks the milk. The nursemaid and the policeman rush back to the bench, and as the nurse runs to the baby, the policeman tussles with the tramp and hauls him off to jail. Once the actors are in costume, the cameras are placed, and the scene is blocked, the short comedy is photographed in two ways: as a continuous take on motion picture film, and as a series of discrete images on glass plate negatives. Of the 1,158 pictures produced that day, 1,152 are distributed in Bamforth and Company's 72-foot, single-shot motion picture, *The Tramp and the Baby's Bottle* (also known as *Chokee Bill and the Baby*), and the remaining six in their Life Model lantern series, *Bobby's Flirtation*. This moment of synchronic symbiosis between lantern slides and motion pictures raises the question: Where is the new in the old and the old in the new? Lantern-film productions demand to be explored.

Bobby's Flirtation, the lantern version of the scene at the park bench, signals a certain departure from Bamforth's standard slide manufacture. Up to this point, the firm's Life Model series—photographic tableaux of models posed in settings to illustrate stories, songs, and other

texts—had been produced inside the firm's Holmfirth studio with props and painted backdrops and depicted sentimental, temperance, and religious subjects.[1] *Bobby's Flirtation*, by contrast, is a comedy performed at an exterior location. What is more, it is made in tandem with *The Tramp and the Baby's Bottle*. Indeed, the lantern series and the motion picture are identical in nearly all respects, from the tramp, to the park, to the nursemaid, pram, bench, policeman, baby, and bottle. But what makes *Bobby's Flirtation* a singularity is the fact that it integrates aspects of newer media into its older form: It refashions the film, *A Tramp's Dinner* (American Mutoscope & Biograph Co., 1897); it repurposes the halfpenny comic strip character, *Chokee Bill* (Frank Holland, 1897–1900); and it recycles aspects of the popular vaudeville song sketch, *On the Benches in the Park* (James Thornton, 1896). One could even argue that it remediates its own motion-picture companion.

Figure 1.1. Bamforth's *Bobby's Flirtation* (1899) and *The Tramp and the Baby's Bottle* (1899)

[1] For examples of Bamforth's Life Model slide series and the sentimental stories they depict, see *To Catch a Sunbeam*, ed. by G. A. Household and L. M. H. Smith (London: Michael Joseph, 1979).

Curiously, *Bobby's Flirtation* has been heretofore unrecognized, or rather, unnoticed. Instead, the historiography has focused on *The Tramp and the Baby's Bottle* as one of a dozen or so films produced by Bamforth, in partnership with Riley Brothers of Bradford, between 1898 and 1901.[2] These "RAB" films are typically described in linear terms, as the natural, obvious, and immediate next step for Riley and Bamforth. The former, the "largest lantern outfitters in the world," had been distributing their own motion picture projectors since 1896 and their own movie cameras since 1897; the latter, the "largest producer of life model slides in the world," had been producing fictional lantern narratives for over fifteen years.[3] Combining Riley's apparatus and Bamforth's expertise, as traditional histories recount, these "Yorkshire Pioneers" made an experimental move into a new venture, producing motion pictures that are both significant for their innovative use of framing and editing, and distinct from Bamforth's lantern-slide manufacture.[4] This narrative, in fact, chimes with the two main tendencies in understandings of

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[2] Rachael Low and Roger Manvell, *The History of the British Film 1896-1906* (London: George Allen & Unwin, 1948), 15–16; Allan T. Sutherland, "The Yorkshire Pioneers," *Sight and Sound* 46 (Winter 1976–77): 48–51; John Barnes, *The Beginnings of the Cinema in England 1894-1901, Volume 3: 1898* (Exeter: University of Exeter Press, 1996), 53–56; and Richard Brown, "Film and Postcards – Cross Media Symbiosis in Early Bamforth Films," in *Visual Delights – Two: Exhibition and Reception,* ed. Vanessa Toulmin and Simon Popple, (Eastleigh: John Libbey, 2005), 236–52. Brown, in fact, links several RAB films to Bamforth's postcards, which show the development of the same comic events. However, he overlooks the fact that the postcards were produced from Bamforth's Life Model slides and inaccurately dates them to 1898. Bamforth's humorous Life Model series were produced in 1899, and the postcards sometime after 1902 following the introduction of divided back postcards. The most comprehensive, if incomplete list of Bamforth, Riley, and "RAB" films can be found in Denis Gifford's *The British Film Catalogue 1895-1985: A Reference Guide*. (New York: Facts on File, 1986).

[3] See advertisements for Bamforth (p. vi) and Riley (p. xvii-xviiii) in *The Optical Magic Lantern Journal* 8, no. 100 (September 1897).

[4] See, for example, Sutherland, "Yorkshire Pioneers," p. 50: "The lack of dramatic subjects indicates that Bamforth's regarded their filmmaking as distinct from, and secondary to, their lantern slide and postcard work. This impression is supported by the fact that no attempt was made to produce filmed equivalents of their slide sets though they were often turned into postcards."

the lantern-film relation: that the lantern reached its zenith just before the arrival of motion pictures and that its influence on early film was not felt until after 1900, when multi-shot films were produced with greater regularity.[5] If necessarily so, Bamforth's Life Models would have plateaued around 1888, when fellow Yorkshire Pioneer Louis Aimé Augustin LePrince filmed *Roundhay Garden Scene*, and *Bobby's Flirtation* would have remained an "unflirtability"—unimaginable in 1899, and unthinkable one hundred and twenty years later.

Up to now, the lantern-film relation has been commonly understood as a one-way street, with motion pictures benefiting from and improving on established lantern practices. This view has been reinforced, somewhat paradoxically, by the vigorous critical reevaluation of early cinema sparked by the 1978 Brighton International Federation of Film Archives (FIAF) Conference. In the main, this discourse has been invested in rethinking teleological histories, which in chronicling the aesthetic and technological development of motion pictures, assumed early films were an incomplete, embryonic form of the mature, narrative feature films institutionalized in the latter half of the 1910s. Over the past several decades, the study of early cinema's multiple "origins" and its reliance on preexisting entertainments has enriched understandings of early film's sophistication, self-awareness, and difference. However, as one of early cinema's so-called origins and a member of its broader media network, the lantern has

[5] See, for example, Richard Brown and Barry Anthony, *A Victorian Film Enterprise: The History of the British Mutoscope and Biograph Company, 1897-1915* (Trowbridge: Flicks Books, 1999), 33: "The lantern and illustrated lecture business was significant in giving filmmakers a ready supply of pre-tested and proven successful themes for fiction films and in providing them with knowledge of visual narrative construction, but this was a development that only became important after the Victorian period."

consistently been conceived, rather narrowly, as a "pre-cinematic" medium that aspired to the representational completeness of motion pictures and was absorbed and superseded by them.[6]

At Brighton, both Charles Musser and Tom Gunning, among others, called attention to early fictional film's inheritance of the magic lantern tradition, albeit with different emphases.[7] Musser traced the lantern's influence on motion picture practice across a number of examples during the 1900–1903 period: the use of pre-existing lantern conventions governing the relationship of interior and exterior shots in *Execution of Czolgosz* (Edison, 1901); the adoption of traditional lantern techniques such as dream balloons, visions, and dissolves in *Jack and the Beanstock* (Edison, 1902); and the congruencies between story films and lantern-slide series manufactured in England in the 1880s and 90s. In comparing the lantern series *Bob the Fireman* with Edwin S. Porter's *Life of an American Fireman* (Edison, 1903), Musser asserted that the latter "culminated, at least for Porter, in the cannibalization of magic lantern traditions—its imagery, its narrative and the use of certain techniques."[8] Accordingly, 1903, as the point when "the limitations of the magic lantern show were felt and exceeded," marked a transformation

[6] See John H. Bird, *Cinema Parade: Fifty Years of Film Shows* (Birmingham: Cornish Brothers, 1947). The term "pre-cinema" first came into common usage in the mid-twentieth century to refer to a wide range of forms: popular entertainments during the period before the cinema came into being, such as minstrelsy, panoramas, magic lantern displays; devices that produced images with apparent motion, such as the thaumatrope, phenakistoscope, and zoetrope; and the inventions that contributed to the development of motion pictures, such as the biophantoscope, photography, chronophotography.

[7] See *Cinema 1900-1906: An Analytical Study by the National Film Archives (London) and the International Federation of Film Archives*, Vol. 1, compiled by Roger Holman (Brussels: FIAF, 1982). Other papers mentioning the lantern's influence on early cinema were those by Barry Salt, Martin Sopocy, and Noël Burch.

[8] Charles Musser, "Symposium Proceedings," in *Cinema 1900-1906: An Analytical Study*, ed. Roger Holman (Bruxelles: FIAF, 1982), 54. The lantern series referred to by Musser is *Bob the Fireman: or Life in the Red Brigade*, a set of twelve chromolithographic slides manufactured by J. Theobald & Co. before 1893.

within the longer, continuous history of projected images, which Musser would term "screen practice": a diachronic conception that implicitly and explicitly characterized the relationship between the lantern and motion pictures as successive and causal.[9]

Gunning, on the other hand, adopted a more synchronic orientation to the question of early film's lantern legacy, in which he described the correspondence between motion pictures, lantern series, and other contemporary entertainments such as comics and vaudeville as showing a "strong symbiotic relation."[10] So, *Happy Hooligan* (American Mutoscope and Biograph, 1903) borrowed its form and content from a comic strip, *Waiting for Bill* (AM&B, 1903), and reproduced a vaudeville turn, and *Rock of Ages* (Edison, 1902) replicated a dissolving lantern series. While Gunning stressed that these interconnections necessitate further research, he suggested that they formed the basis of a "non-continuous style" of early motion pictures, "which maintains the separateness of its component parts, instead of absorbing them into an illusion of a continuous narrative flow."[11] This aesthetic, he argued, influenced a number of aspects of motion pictures during the 1900–1906 period, many of which—from the presentation of a series of tableaux to repeated action edits to the thematic linking of discrete views that he termed "the anthology format"—relate to the narrative style of the lantern.[12] Unlike the continuous style that began to develop with chase films, the non-continuous style and its seeming

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[9] Musser, "Symposium proceedings," 54 and Musser, "Toward a History of Screen Practice," *Quarterly Review of Film Studies* 9, no. 1 (1984): 59–69.

[10] Tom Gunning, "The Non-Continuous Style of Early Film (1900–1906)," in *Cinema 1900-1906: An Analytical Study*, ed. Roger Holman (Bruxelles: FIAF, 1982), 220.

[11] Gunning, "The Non-Continuous Style of Early Film (1900-1906)," 220.

[12] Gunning, "The Non-Continuous Style of Early Film (1900-1906)," 224.

"anomalies"—what Gunning would conceptualize as "the cinema of attractions"—was not aligned with a narrative linearity that prefigured D.W. Griffith's parallel editing, but with modes of representation and address that were very much in keeping with "that of popular entertainments of the time."[13]

This chapter initiates my exploration of such lantern anomalies as *Bobby's Flirtation*, a comic series that aligned itself with the popular arts of comics, vaudeville, and motion pictures at the turn of the last century—a brief, bright blip on Musser's screen of screen history. Following Gunning's approach to style and form while responding to his call for further research into the symbiosis between early film and the lantern, I examine the unusual phenomenon of *lantern-film production*. In a narrow sense, lantern-film production constitutes a handful of jointly produced motion picture and Life Model comedies made by Bamforth between 1899 and 1901. In a broader sense, it encompasses lantern series and motion pictures that shared narratives during cinema's first decade. In both senses, it recasts the lantern-film relation as a dynamic two-way street of reciprocal interchange, with vast implications. Indeed, lantern-film production provides a fresh perspective from which to revisit the dialectics of attractions and narrative in early cinema studies. By shedding light on the coexistence of storytelling and display in gag lantern series and films, it suggests that determinations of either/or might be fruitfully reconsidered through a logic of both/and.[14] Further, it reopens the question of early cinema's

[13] Gunning "Symposium Proceedings," in *Cinema 1900-1906: An Analytical Study*, 50.

[14] Gunning himself makes this point as early as 1984. See Tom Gunning, "Non-Continuity, Continuity, Discontinuity: A Theory of Genres in Early Film," *Iris* 3 (1984):102: "The challenge that early cinema offers to film history is a search for a method of understanding the transformations in narrative form in cinema's first decades … without defining it simply as a relation of difference from a model of continuity."

"intermediality"—its multiple, hybrid identity shaped by connections to other fin-de-siècle entertainments—by offering a more nuanced and detailed picture of the back-and-forth movement between lantern series and motion pictures.[15] Finally, lantern-film production challenges us to radically rethink old-new media relations in c. 1900 and replace the specter-like models of linearity and causality—which may no longer plague early cinema, but certainly continue to haunt the lantern—with models of superposition and reciprocity.[16]

In what follows, I will elaborate the structure and style of lantern gags, describe their engagement with other forms, and analyze such lantern-film productions as *Bobby's Flirtation/The Tramp and the Baby Bottle*, which may or may not clear up unanswered questions concerning early cinema's lantern inheritance. But it will, I hope, raise new ones about the possibilities of the lantern at the turn of the twentieth century. For although I cannot recover the ephemeral performance practices encompassed by lantern work one hundred and twenty years ago, I can bring lantern-film production to light, where its very existence—its mutual "business" around park benches—may help us to rewrite the history and theory of the lantern while reframing synchronic and diachronic understandings of media change. Within the period c.1899–1901, lantern-film production re/presents the lantern as a contemporary, protean, and generative form that not only influenced early film but was also influenced by it. From a *longue durée* perspective, it does more than suggest "it could have been otherwise;" like the tramps and

[15] On intermediality, see André Gaudreault, "Afterward (1998): Cinema, Between Literariness and Intermediality," in *From Plato to Lumière: Narration and Monstration in Literature and Cinema*, trans. Timothy Barnard (Toronto: University of Toronto Press, 2009), 151–64.

[16] Thomas Elsaesser, "Is Nothing New? Turn-of-the-Century Epistemes in Film History" in *A Companion to Early Cinema*, ed. André Gaudrealt, Nicolas Dulac, and Santiago Hidalgo (Chichester: Wiley-Blackwell, 2012), 605. As Elsaesser shows, early cinema is now considered "both a continuation of old media and the start of something new."

mischievous boys figured within them, lantern-film productions upset the established order to insist that, however fleetingly, it *was* otherwise.[17] Lantern-film productions demand to be anatomized.

Anatomy of a Lantern Gag

All you need to make a movie is a man, a boy, and a garden hose. Thus the Lumière Brothers "inaugurated" silent film comedy with their one-shot classic, *L'Arroseur arrosé/The Waterer Watered* (1895). The man waters a garden with a hose; the boy steps on the hose to block the water flow; the boy releases the hose, spraying the man; and the man gives the boy a spanking and resumes watering the garden. Thus, early cinema historians elaborated various positions concerning the single-shot gag film, identifying its non-narrative, quasi-narrative, micro-narrative, and narrative natures. This most corporeal of early film genres is perhaps also the most promiscuous. It inherits its characters, situations, and scenarios from comic strips and vaudeville sketches, is unabashedly copied, and infinitely recycled. Indeed, *L'Arroseur arrosé*'s scenario can be traced to "Histoire sans paroles—Un Arroseur public" (1889), a comic strip by Christophe (Georges Colomb), as Donald Crafton has shown. It was copied (remade or duped) a dozen times during what Jane Gaines has called "early cinema's heyday of copying."[18] But where is the magic lantern's place in this "gagography"? How did it represent gags, and what

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[17] Noël Burch, quoted in Thomas Elsaesser, "The New Film History as Media Archaeology," *CiNéMAS* 12, no. 2–3 (2004): 81.

[18] Donald Crafton, *Before Mickey: The Animated Film, 1898*-1928 (Chicago: University of Chicago Press, 1993), 39; Jane Gaines, "Early Cinema's Heyday of Copying: Too Many Copies of *L'Arroseur arrosé* (*The Waterer Watered*)," *Cultural Studies* 20, No. 2–3 (2006). For a list of the multiple versions of *L'Arroseur arose*, see p. 235. Gaines defines copying as "the production of a print double by reprinting or retelling" (237).

does it have to tell us about the popular culture at the turn of the last century? What is a *lantern gag*? To begin with, we can look at two concrete examples of what does not constitute a lantern gag. A lantern gag is not a comic movable slide, such as the infamous "Man Eating Rats," wherein with the turn of a handle, innumerable rats crawl up the bed and into the sleeping man's mouth. It is also not a movable comic slip slide, as in the single slipper "Boy Riding Pig," which represents the boy riding the pig and falling off it when the slip-glass is pulled out. Both of these "movable comic views," introduced in the 1840s and 1850s, were offered in the 1902 Kleine Optical Company catalogue in their "Exhibition Outfit No. 14a," which included projection apparatus for slides and films; 1,500 feet of Edison films; the 61-slide set of colored stereopticon views (photographic lantern slides), "Shadows of a Great City;" related actualities of New York City, such as panoramic films of the Brooklyn Bridge and the East River; several thematically linked comic films, as in *Burglar on the Roof* (Edison, 1898); a few unrelated comic slide sets; a number of chromatropes, dissolving views, statuary slides, and illustrated song slides; and an Edison phonograph with twenty-four concert records.[19] Within Kleine's Outfit—itself a demonstration of the superposing layers of media on offer, as well as a window into what an *expanded lantern exhibition* might have looked like in c. 1900—these movable comic views punctuated longer sequences of films and slides with exclamation marks of humor. Comic views like "Boy Riding Pig" may be funny or reveal different aspects of the image in their alternating positions, but they do not represent the development of a prank or joke, which is to say, they are not lantern gags.

[19] Kleine Optical Company, *Complete Illustrated Catalogue of Moving Picture Machines, Stereopticons, Magic Lanterns, Accessories and Stereopticon Views*, June 1902, 18.

Figure 1.2. Comic slipping slide, “Boy Riding Pig

What I mean by a lantern gag is simply this: a gag presented in the style and medium of the lantern—that is, a comic series of lantern images, or projected and performed images in a magic-lantern exhibition. According to Václav Havel, whose definition I am appropriating on behalf of lantern gags, a gag is “a certain case of defamiliarization.”[20] As such, Havel argues, it’s dialectical: the thesis, or phase one, is the exposition of a situation; phase two, the antithesis, is the introduction of the second element, and the synthesis is the defamiliarization of the first phase by the second. In gags, the automatism of the first phase—its absurdity—is uncovered, and therein lies their comic substance.

The Lumière film clearly corresponds to Havel’s three-part structure: the man watering the garden is the first phase, the mischievous boy stepping on the hose is the second phase, and the man getting sprayed is the synthesis. The spanking bit is, I think, a kind of surplus or overflow, with optional variants. In Lumière’s 1896 version of *L’Arroseur arrosé*, for instance,

[20] Václav Havel, “Anatomy of a Gag,” trans. Michal Shonberg, *Modern Drama* 23, no. 1 (Spring 1980): 13–24.

the gardener hoses down the boy. In his analysis of the 1895 version, Gunning considers the spanking a "counteraction" that does not affect the basic structure of what he calls "mischief gag films," *L'Arroseur arrosé* being the locus classicus of the genre that thrived in most cases as single-shot films, from 1896 to 1905.[21] At any rate, lantern gags do the same comic work as mischief gag films; that is, if the main phases of action in *L'Arroseur arrosé* were stilled and presented as series of lantern images, they would constitute a lantern gag.

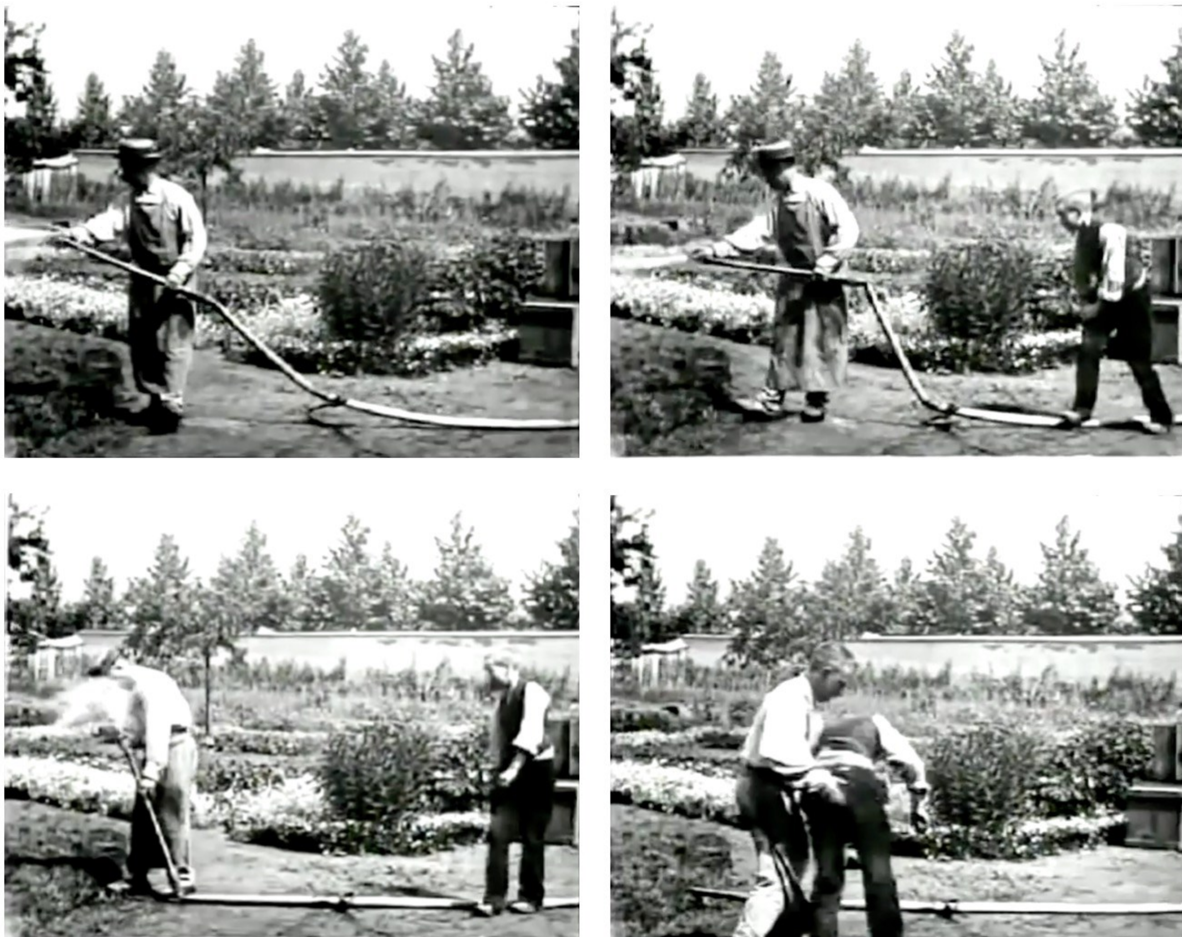

Figure 1.3. Four frames/phases of comic action in Lumière's *L'Arroseur arrosé* (1895)

[21] Tom Gunning, "Crazy Machines in the Garden of Forking Paths: Mischief Gags and the Origins of American Film Comedy," in *Classical Hollywood Comedy*, ed. Kristine Brunovska Karnick and Henry Jenkins (New York: Routledge, 1995), 89–90.

The anatomy of a lantern gag highlights key aspects of lantern grammar, and in so doing, makes a case for close analysis of comic lantern series, an operation that can revitalize, complicate, and contribute to discussions of the lantern-film relation in a number of interesting ways.

How to Read a Lantern Gag

How do you read a lantern gag? At the outset, we can mine the cinema studies toolbox (as Miriam Hansen urged us to do when working on "old" or "new" media) by revisiting classic debates around the relationship between gags and narrative.[22] While this conversation is focused on American slapstick comedy of the 1920s, it can also be invoked to think through the similarities and differences between lantern gags and gag films during their most fertile period of interchange, the first decade of motion pictures. In longer, silent-era comedy films, the gag-narrative relationship has, of course, been masterfully conceived by Crafton as the dichotomy between the pie, which disrupts narrative (or halts the diegesis), and the chase, the narrative's linear trajectory. This is insightfully responded to by Gunning, who considers gag and narrative to be in a "dialectical interrelation" in which gags are absorbed or integrated into the overarching narrative.[23]

The question of narrativity in earlier, single-shot gag films has elicited a wider range of positions. In Crafton's view, a film like *L'Arroseur arrosé* might be a "quasinarrative" with a

[22] Miriam Hansen stressed this approach in her "Cinema Post-Cinema" seminar (University of Chicago, Winter 2010), which explored the distinguishing features of cinema as an experience and aesthetic form in light of various claims of its disappearance in the digital era.

[23] See Donald Crafton, "Pie and Chase: Gag, Spectacle and Narrative in Slapstick Comedy" and Tom Gunning, "Response to Pie and Chase," in *Classical Hollywood Comedy*, ed. Kristine Brunovska Karnick and Henry Jenkins (New York: Routledge, 1995).

"weakly structured set of causes and effects."[24] André Gaudreault has claimed that *L'Arroseur arrosé*, like all single-shot films, is a micro-narrative consisting of an innate "single narrative layer" that "does not have a second level of narrativity," which is dependent on the "articulation between shots."[25] For Gunning, the structure of *L'Arroseur arrosé* "resembles a mini-narrative," in that it shows a "rudimentary narrative structure of cause and effect"—an action taken by a rascal (the boy) and its result/effect on the victim (the gardener).[26] In Marshall Deutelbaum's analysis of Lumière films as structured narrative form, he identifies a sophisticated "structural pattern" in *L'Arroseur arrosé*, a unified design that was created, acted, and symmetrically composed (gardener left, boy right) to present a linear action within a circular framework.[27] Charles Musser claims that the film's choice of subject, camera position, framing, and the decision "to start at moment *x* and stop at moment *y*" makes it "a narrative that is constructed profilmicly."[28] For Nöel Burch, *L'Arroseur arrosé* constitutes a narrative in the strict sense, according to Vladimir Propp's minimum conditions of "beginning-continuation-conclusion."[29] And Gaudreault, having modified his earlier claim, argues that the film "meets the standard of

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[24] Crafton, "Pie and Chase,"109.

[25] André Gaudrealt,, "Film, Narrative, Narration: The Cinema of the Lumière Brothers," in *Early Cinema: Space, Frame Narrative*, ed. Thomas Elsaesser (London: BFI, 1990), 73.

[26] Gunning, "Crazy Machines," 94.

[27] Marshall Deutelbaum, "Structural Patterning in the Lumière Films," in *Film Before Griffith*, ed. John Fell (Berkeley: University of California Press, 1983), 309.

[28] Charles Musser, "Rethinking Early Cinema: Cinema of Attractions and Narrativity," in *The Cinema of Attractions Reloaded*, ed. Strauven Wanda Strauven (Amsterdam: Amsterdam University Press, 2006), 398.

[29] Noël Burch, *Life to Those Shadows*, ed. and trans. Ben Brewster (London: British Film Institute, 1990), 159, n. 1.

the *minimum narrative sequence* perfectly" due to the story's movement from equilibrium (the gardener watering the garden) to disequilibrium (the boy's disruptive prank) to equilibrium (the gardener returns to watering).[30] It's quite a spectrum, but in a way most positions are acceptable, depending on, as Crafton puts it, how insistently narrative is defined.[31]

Thus far, both our hypothetical lantern version of *L'Arroseur arrosé* and the film itself constitute a particular kind of short humorous narrative. But as we continue to read lantern gags from the perspective of single-shot gag films, other questions arise to complicate this understanding. For instance, are the latter narratives or are they narrative condensations? According to David Turconi, there is an overall incongruity between gag films and their corresponding catalogue descriptions. In his comprehensive study of some two thousand American film comedies produced in the first decade of motion pictures, Turconi notes: "The comedies … are…condensed comic anecdotes recounted in a few metres of film. However, when one reads the synopses of some of these films it seems impossible to believe that they last only one to three minutes."[32] Were the gag films' comic narratives condensed to fit the short reels of film, which determined their brief durations? Not necessarily. According to Gunning, gags are marked by concision. "Brevity," he observes (aptly paraphrasing Shakespeare's famous line), "is the soul of the gag," and the "gag form was selected for early film because it fit so perfectly into these constricted requirements."[33] Nevertheless, there is a temporal mismatch

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[30] Gaudreault, *From Plato to Lumière,* 28.

[31] Crafton, "Pie and Chase," 109.

[32] David Turconi, "'Hic Sunt Leones': The First Decade of American Film Comedy, 1894–1903," *Griffithiana* nos. 55-56 (September 1996): 173.

[33] Gunning, "Crazy Machines," 95.

between the events depicted in single-shot films like *L'Arroseur arrosé* and their duration: the actors' movements are not sped up, but the comic actions develop much faster than real-time circumstances would allow. We can fairly say that a familiar hose gag has been compressed to fit the temporal bounds of the reel and the spatial bounds of the frame.

A related question thus arises that further confuses attempts at reading lantern gags through the lens of early film: Are single-shot motion picture comedies filmed gags or gag films? In other words, are they film versions of vaudeville sketches and comic-strip gags, or motion pictures that are conceived, blocked, and photographed as such? Gunning has observed that it can be difficult to tell whether the painted backdrops featured in many early Biograph comedies were meant to represent settings or vaudeville stages, and their catalogue descriptions are often enigmatically vague on the matter: "This is an old and always popular story." "This shows the familiar trick." "Taken from a popular roof garden act," and so on.[34] As the question centers on the difference between utilizing film to record a pre-existing sketch and producing a motion picture according to a particular conception of filmic form, it also evokes the blurred boundary between fiction and nonfiction. Indeed, *L'Arroseur arrosé* is set in Louis Lumière's actual garden in Lyon; the gardener is Lumière's gardener, François Clerc, and the boy is an apprentice carpenter from the Lumière factory, Benoît Duval. And while it is clearly staged and performed, *L'Arroseur arrosé* also wittingly exploits contingency for comic effect, a process that Rob King, following Mary Ann Doane, calls "managed irregularity," and that Dai Vaughan has described as "the harnessing of spontaneity" motivated by a "mountebank behind the camera" (which

[34] Tom Gunning, "The Non-Continuous Style of Early Film (1900–1906)," 221; See the"Comedy" section of American Mutoscope & Biograph Company's *Picture Catalogue* (New York, 1902), 8–53.

incidentally, the mischievous boy acknowledges before he exits frame right).[35] *L'Arroseur arrosé* can't be read as a purely fiction film, in Vaughan's view, because its images had not yet been accorded "the status of dream or fantasy," a status that separates films from their strategies of framing, staging, and address, as well as their ties to the real world.

But what status would be accorded the images in a corresponding lantern version?

Taken together, these questions highlight some important differences between the gag film and the lantern gag. While *L'Arroseur arrosé* possesses a minimal narrative, a fixed duration, and a story world with a referential relationship to reality, our hypothetical lantern version would likely enjoy an expandable narrative, a variable length, and a more enclosed story world. But they also test the limits of what Rick Altman has called a "film-oriented approach" versus a performance-oriented position.[36] If early films were "semi-finished products," as Thomas Elsaesser fittingly puts it, that were finished in exhibition by a variety of sound and projection practices, lantern series were decidedly unfinished.[37] Indeed, humorous slide series only became lantern gags in performance, where they often functioned as comic interludes within variety formats. Like one-shot film comedies, they were performed in very different sites of exhibition, from fairgrounds to meeting halls. As part of a fifteen-minute fairground program,

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[35] Rob King, "Laughter in an Ungoverned Sphere: Actuality Humor in Early Cinema and Web 2.0," in *New Silent Cinema*, ed. Paul Flaig and Katherine Groo (New York: Routledge, 2016), 303; Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002), 192; Dai Vaughan, "Let There be Lumière" in *For Documentary: Twelve Essays* (Berkeley: University of California Press, 1999), 7.

[36] Rick Altman, "From Lecturer's Prop to Industrial Product: The Early History of Travel Films," in *Virtual Voyages: Cinema and Travel*, ed. Jeffrey Ruoff (Durham: Duke University Press, 2006), 61.

[37] Thomas Elsaesser, "La notion de genre et le film comme produit 'semi-fini': l'exemple de Weihnachtsglocken de Franz Hofer (1914)," *1895* 50 (December 2006): 67–86.

they were presented alongside marionette, menagerie, and magic shows;[38] as part of an evening-long program in a town hall, they were shown between nonfiction lecture series on the South African War, or films on the death of President McKinley.[39] One way these short lantern comedies were able to meet the diverse demands of exhibitors was by capitalizing on audience familiarity with the gags that circulated among popular entertainments. An effort to consider these familiar comic performances, conventions, and narratives might afford us a clearer picture of how lantern gags made meaning.[40]

Such an effort must begin with the recognition that the lantern's repertoire in c.1900 in fact included gags aimed at an adult audience. There is a received view of late-nineteenth-century lantern performance based on the fine scholarship to date that aligns it with the sober discourses of religion, travel, and temperance, and/or with family amusements like fairytales and Dickensian adaptations.[41] But this view is somewhat distorted. While the British lantern trade produced more lecture sets and temperance-themed Life Model series than other subjects, it also engaged in the modern, knockabout humor of the times.[42] For instance, Ally Sloper, the ne'er-

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[38] On the fairground as a venue for motion picture exhibition, see Vanessa Toulmin, "Cuckoo in the Nest: Edwardian Itinerant Exhibition Practices and the Transition to Cinema in the United Kingdom from 1901 to 1906," *The Moving Image* 10, no. 1 (Spring 2010): 62–64. On magic lantern exhibition at the fairgrounds in Britain, see *Encyclopaedia of the Magic Lantern*, ed. David Robinson, Stephen Herbert, and Richard Crangle (London: Magic Lantern Society, 2001), 111.

[39] Charles Musser, in collaboration with Carol Nelson, *High Class Moving Pictures*: *Lyman H. Howe and the Forgotten Era of Traveling Exhibition, 1880–1920* (Princeton: Princeton University Press, 1991), 121.

[40] See Charles Musser, "The Nickelodeon Era Begins: Establishing the Framework for Hollywood's Mode of Representation," in Elsaesser, *Early Cinema*, 257–59. According to Musser, the legibility of motion pictures often depended upon audience familiarity with their narratives from other media forms.

[41] See the essays in the collection, *Screen Culture and the Social Question 1880-1914*, ed. Ludwig Vogl-Bienek and Richard Crangle (New Barnet, UK: Libbey, 2014).

[42] See Richard Crangle, "'Next Slide Please': The Lantern Lecture in Britain, 1890-1910," in *The Sounds of Early Cinema*, ed. Richard Abel and Rick Altman (Bloomington: Indiana University Press, 2001), 42.

do-well Victorian comic-strip antihero ("sloping down the alley" meant to sneak away without paying rent), star of *Judy* (1867-1883) and *Ally Sloper's Half Holiday* (1884-1923) and celebrated character on the music hall circuit, was featured in at least thirteen lantern slide sets, including a twelve-slide series by Bamforth, *Adventures of Ally Sloper in a Snowball* (c. 1884–88). These representations not only highlight Sloper's comic superstardom, as comics scholar Roger Sabin has demonstrated, but also reflect the lantern's efforts to capitalize on the popularity of a character already established in other media.[43]

As new authority-defying characters appeared in sketch performances and comic strips, the lantern continued to participate in this emerging media environment. Back and forth across the pond, gags—hose gags, park bench gags, black and white gags, and so on—circulated contemporaneously on the turn-of-the-century page and stage. A regular feature of Britain's halfpenny comic journals and music halls, France's illustrated journals and music halls, and America's newspaper comics and vaudeville theaters, gags were consumed by an urban mass audience assembled in the millions and comprised of a newly educated working class with time and disposable income to spend on recreation.[44] The tramps and bad boys that performed them held great appeal given their anarchic subversion of Victorian bourgeois values, and early film producers were quick to tap into this trend, producing scores of one-shot tramp and bad boy

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Crangle bases his analysis on the Riley Brothers slide catalogue of 1908, which lists nearly 1,500 slide sets accumulated by a variety of British manufacturers over a twenty-year period, thus providing a fairly accurate picture of the most "commercially attractive subjects." Crangle estimates that "Comic Slides" accounted for 18 percent of the sets on offer.

[43] Roger Sabin, "Ally Sloper: The First Comics Superstar?," in *A Comics Studies Reader*, ed. Jeet Heer and Kent Worcester (Jackson: University Press of Mississippi, 2009), 177–89.

[44] On leisure and popular entertainments in Britain, see Peter Bailey, *Popular Culture and Performance in the Victorian City* (Cambridge: Cambridge University Press, 1998).

comedies from 1897 to 1903. At the end of the nineteenth century and the beginning of the twentieth, the British lantern trade followed suit, albeit on a much smaller scale, by introducing humorous slide sets in the Life Model format, as photographic slides of models costumed and posed in settings. Although Life Models had been reserved for serious subjects, this new direction is not surprising; for turn-of-the-century audiences, a Life Model series based on a familiar gag could call up a wide range of popular acts, sketches, and "business," themselves inherited from older forms.

A complimentary approach to reading lantern gags, then, would be to examine their cultural anatomy. Yuri Tsivian has proposed assembling a "gagography," or a compilation of comic performance practices—from the *lazzi* of the *commedia dell'arte* to the comic routines of Charles Chaplin—as a pathway to understanding the stage's influence on silent film comedy.[45] Bearing Tsivian's suggestion in mind, we can trace gags as they were handed down or appropriated from pre-existing comic traditions, as Bryony Dixon has done with regard to the harlequinade, British music hall sketch comedy and film slapstick. We can elaborate their genealogy, as has Ian Christie in uncovering the cultural roots of pantomime and magic theater in Robert Paul's 1901 trick film, *The Magic Sword*.[46]

Following this approach, we can readily see how gags traversed the stage and screen entertainments that put them to use through, for example, the figure of the tramp, whose constant

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[45] Bryony Dixon, "The Good Thieves," in *Slapstick Comedy*, ed. Tom Paulus and Rob King (New York and London: Routledge, 2010), 22. Dixon mentions that Yuri Tsivian and Mike Hammond discussed this approach at the Chaplin Conference, held at the BFI in 2005.

[46] Dixon, "The Good Thieves," 21–36 and "Harlequin in the New World," in *Chaplin's Limelight and the Music Hall Tradition*, ed. Frank Scheide, Hooman Mehran, Dan Kamin, (Jefferson, NC: McFarland & Co., 2006), 144–51; Ian Christie,"The Magic Sword": Genealogy of an English Trick Film," *Film History* 16, no. 2 (2004); 163–71.

struggle to secure a free meal and a place to sleep has long been a wellspring of comedy. These include early tramp "ancestors" such as the Zanni and Clown in the *commedia dell'arte* and the harlequinade, respectively; tramp comedian vaudeville and music hall acts like Harry Taft's "The Musical Tramp," W.C. Fields' "Tramp Juggler," Charles R. Sweet's "Tramp Burglar," and Nat Wills's "The Happy Tramp;" and real life tramps like the Irishman, John Garvey, who in 1894 famously slept in John Jacob Astor's Fifth Avenue mansion. Screen representations of the "Astor Tramp" in Biograph's *Tramp in a Millionaire's Bed* (November 1897) were made a few months after their first "tramp film," *The Tramp and the Bather* (June 1897). Finally, there is Edison's "illustrated song film," *The Astor Tramp* (1899).[47] In Biograph's *Picture Catalogue*, with its elegant three-frame presentation, the gag's three-part structure, system, and logic are particularly compelling.

In the case of *Bobby's Flirtation*/*The Tramp and the Baby's Bottle*, nearly every element extends back to earlier comic traditions and forward to later stage and screen comedies. A harlequinade in 1887, for instance, featured the stock characters of Nurse, Policemen, and Clown performing variation of the pram gag:

> A nurse, with her little charge in a perambulator, foolishly listens to the amorous prattle of Policeman A, and Policeman X, and while her attention is drawn away from the baby, the wicked clown and pantaloon, always on the look out for mischief, steal the innocent little darling, and finally pop it into a huge sausage machine, from which after a few turns at a crank, the poor little thing emerges in the shape of yards of *salchichon de Valdivia*, sausage. Later on this is inserted in the tube of the machine and by a reverse motion of the crank the little baby emerges from the hopper crying as if its heart would break. The

[47] On *commedia dell'arte*, see Mel Gordon, *Lazzi: The Comic Routines of the Commedia dell'arte* (New York: Performing Arts Journal Publications, 1983). According to Gordon, the tramp-like Zanni characters are "in a constant search for nourishment" and "most of the food in lazzi are the kind that babies eat" (21). On vaudeville tramps, see Douglas Gilbert, *American Vaudeville: Its Life and Times* (New York: Dover Publishing, 1968). On Edison's tramp song film, see Rick Altman, *Silent Film Sound* (New York, Columbia University Press, 2007),108.

> nurse is near at hand, and as a matter of course her joy on recovering her charge knows no bounds.[48]

Yet another variation of the pram gag resurfaced in the Karno Company's 1910 sketch "A Harlequinade in Black and White," a "shadowgraph pantomime" performed behind a white screen. Featuring Charles Chaplin as the leading comedian and an ensemble of Harlequin, Clown, Pantaloon, Columbine, Nursemaid, Policeman, and Strolling Musician in silhouette, it included "fun with a stolen bottle" and a baby that was "stolen from the carriage of the nurse-maid."[49] Several years later, Chaplin made several films "full of rough stuff and nonsense in parks, with policemen and nursemaids." These include *Twenty Minutes of Love* (1914), *Recreation* (1914), *Getting Acquainted* (1914), and *In the Park* (1915), lending credence to his famous claim, "All I need for a comedy is a park, a policeman, and a pretty girl."[50]

But we can go further with *Bobby/Tramp* and locate at least five additional film versions with the same scenario produced between 1897 and 1903. Biograph produced three: *A Tramp's Dinner* (1897), *On a Milk Diet* aka. *Take Mellon's Food* (1902), and *While Strolling in the Park* (1904). The other two versions were Edison's *The Tramp and the Nursing Bottle* (1901) and William Haggar's *The Tramp and the Baby's Bottle* (1903). In all six versions, the three main comic phases of the gag are identical, while the endings vary (in the Edison version, the tramp ends up in a lake, and in Haggar's film, he loses a leg). As with *Bobby/Tramp*, the first two

[48] *Chilean Times*, quoted in *The Record* 16 no. 250 (July 1887): 3. The Harlequinade was performed in Valparaiso, Chile, presumably for a largely British audience.

[49] See David Robinson, *Chaplin: His Life and Art* (New York: McGraw-Hill, 1985), 91–92, and Frank Scheide, "The History of Low Comedy and Nineteenth and Early Twentieth Century English Music Hall as Basis for Examining the 1914-1917 films of Charles Spencer Chaplin" (unpublished Ph.D. thesis for University of Wisconsin- Madison, 1990), 286. Karno 's "Harlequinade," a holiday extra, was performed in New York City at American Music Hall, December 26, 1910 and at Plaza January 2, 1911.

[50] Charles Chaplin, *My Autobiography* (London: Penguin Books, 2003), 209 and 159.

Biographs conclude with the policeman hauling the tramp off to jail, per the catalogue description of *On a Milk Diet*:

> This illustrates an old and time-honored joke, but it is very well done and very laughable. A nurse girl becomes interested in a park policeman, and forgets her charge. A tramp sneaks up, and steals the baby's bottle. He is rapidly devouring its contents when the policeman discovers him, and marches him off to jail.[51]

Figure 1.4. Frame from Biograph's *On a Milk Diet* (1902)

Our little lantern-film production of 1899, then, is at the center of a centuries-long comic clown/tramp tradition, a turn-of-the-century cross-medial tramp craze, and a wave of early nurse-policeman-tramp-baby-bottle films.[52]

[51] American Mutoscope & Biograph Company, *Picture Catalogue*, 49.

[52] On tramp films, see David Robinson, "Comic Series," in *Encyclopedia of Early Cinema*, ed. Richard Abel (London: Routledge, 2010), 145. Between 1897 and 1902, at least forty "Tramp' films" were produced, unwittingly establishing, in Robinson's view, the "earliest distinct comic series."

Another important aspect of the cultural anatomy of lantern gags is, of course, comic strips, which we can explore through the figure of the mischievous boy whose raison d'être was to pelt authority figures with pea-shooters, douse them with buckets of water, and pummel them with snowballs. The mischievous boy's traversals from page to screen are well known. Bad boys enlivened the pages of such late-nineteenth-century books as Thomas Bailey Aldrich's *The Story of a Bad Boy* (1869), Mark Twain's *The Adventures of Tom Sawyer* (1876), and George Wilber Peck's *Peck's Bad Boy and His Pa* (1883), supplying early filmmakers with a genre, as Peter Krämer has argued.[53] Mischievous boys also abounded in comic strips such as *The Katzenjammer Kids* and *Buster Brown*, which provided Biograph and Edison with characters for their films.[54] And the situations and storylines of other comic strips, many of which featured anonymous mischievous boys, supplied early filmmakers with a seemingly limitless amount of material to adapt, as Crafton has noted.[55] Indeed, the website "Töppferiana" has uncovered twelve cases, in addition to *L'Arroseur arrosé,* in which the scenarios of Lumière films came from French or German comic strips.[56] But *L'Arroseur arrosé* stands out from the pack for the

[53] Peter Krämer, "Bad Boy: Notes on a Popular Figure in American Cinema, Culture and Society, 1895-1905," in *Celebrating 1895: The Centenary of Cinema*, ed. John Fullerton (Sydney: John Libbey, 1998), 119. According to Krämer, in the late 1890s and early 1900s, Biograph produced more bad-boy films than any other genre of story film.

[54] John L. Fell, "Cellulose Nitrate Roots: Popular Entertainments and the Birth of Film Narrative," in *Before Hollywood: Turn-of-the-Century American Film* (New York: Hudson Hills Press, 1987), 91.

[55] Crafton, *Before Mickey*, 37.

[56] "Films Lumière: les cases avant l'écran," *Cinéma* (June 19, 2018), http://www.topfferiana.fr/2018/06/films-lumiere-les-cases-avant-lecran/

sheer number of comics it repurposed, bearing testimony to the hose gag's immense popularity. Indeed, the hose gag continued to circulate into the 1910s and beyond.[57]

Less well known is the fact that the mischievous boys that appeared in the weekly German humor magazine *Fliegende Blätter* (*Flying Leaves*) and in the *Münchner Bilderbogen* (*Munich Picture Strips*) supplied the lantern trade with a trove of material for comic slide series. The work of Wilhelm Busch, for instance, creator of *Max and Moritz: A Story of Seven Boyish Pranks* (1865), exploited in seven countries and six languages in his own lifetime, according to comics historian David Kunzle,[58] was plagiarized by at least nine British slide manufacturers in no less than thirty lantern sets. Moreover, at least three lantern versions of Busch's mischief boy strip, *Diogenes und die bösen Buben Von Korinth*/ *Diogenes and the Bad Boys of Corinth* (1862), were produced in Britain in the late nineteenth century: *Diogenes and the Boys of Corinth* (Pumphrey Brothers, 7 slides, 1872), *Diogenes and the Naughty Boys of Corinth* (Wrench & Son, 12 slides, c. 1887), and *Diogenes and His Tub* (Bamforth & Co., 14 slides, c. 1890).[59] Such promiscuous borrowings from adjacent media and unauthorized remakes of other lantern series were a normal aspect of lantern-slide manufacture; they also prefigure early cinema's heyday of copying.

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[57] For the most comprehensive collection of hose gags, see Paul Karasic and Mark Newgarden, *How to Read Nancy: The Elements of Comics in Three Easy Panels* (Seattle: Fantagraphics Books, Inc., 2017), 167–83.

[58] David Kunzle, "Busch Abroad: How a German Caricaturist Willy Nilly Helped Launch the New Cheap Comic Magazines in Britain and the United States," *Victorian Periodicals Review* 25, no. 3 (Fall, 1992): 99.

[59] See Herman Bollaert, "Wilhelm Busch: Diogenes and the Naughty Boys of Corinth," in *Magic Images: The Art of Hand-Painted and Photographic Lantern Slides*, ed. Dennis Crompton, David Henry, and Stephen Herbert (London: The Magic Lantern Society of Great Britain, 1990), 35.

Ultimately, what this survey demonstrates is the extent to which gag recycling was a key characteristic of late nineteenth- and early twentieth-century entertainments. The imaginative reworking of familiar gags was both the ambition of comic strip artists, vaudeville performers, and early filmmakers and the delight of audiences that paid to see fresh approaches to "old and time-honored" jokes on the page, stage, and screen. But such a review also exposes the limits of the "in context" approach of uncovering social influences and cultural practices, which certainly deepen and enrich our knowledge about a given lantern gag, but can only indirectly inform our understanding of it. To be sure, gags are unique structures with their own system and logic that exist independently of the page, stage, and screen, as Gunning and Crafton have shown. [60] Moreover, they are marked by economy, guided by a presentational aesthetic, and aimed at comic impact—what Henry Jenkins calls the "vaudeville aesthetic."[61] But while the structures, motivations, and desired ends of the comic strip, vaudeville sketch, and single-shot film versions of a given gag may be similar, the means are very different indeed. At this point the question of textual analysis urges us away from intermedial considerations and directs our exploration toward lantern language, grammar, and form.

The Mischievous Boy

Let us turn to *The Mischievous Boy*, a four-slide comic series featuring a man, a boy, and a garden hose. The slides are "British size" (3.25" x 3.25"), the images are round, drawn, and painted, and the composition is consistent throughout. On the left, a portly old man holding a

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[60] Gunning, "Crazy Machines," 94; Crafton, "Pie and Chase," 109.

[61] Henry Jenkins, *What Made Pistachio Nuts? Early Sound Comedy and the Vaudeville Aesthetic* (New York: Columbia University Press, 1992).

hose stands next to a garden. On the right, a mischievous boy crouching around the corner of a brick building spies the man. The corner of the building forms a vertical division between the garden on the left and the building on the right, the respective spaces of the man and the boy. A garden path, on which the man and boy are placed, connects the two spaces, and a hose directs our eyes from the right edge of the frame toward the site of the gag's climax—the nozzle. In the first image, we see the backside of the man, who smokes a pipe while spraying the garden, and the backside of the boy, who stands behind the building and watches the man. In the second image, the boy, now in profile and facing left, steps on the hose while leaning back and cocking a snook (thumbing his nose) at the man. The man is in the same position as he was in the first image, but the water has ceased to flow from the hose. In the third image, the man has turned around and is eyeing the nozzle, as the boy, still in profile, continues to step on the hose. In the fourth and final image, the man is getting sprayed by the hose as the boy, who has released the water flow, points at the calamity and smiles at the viewer.

The Mischievous Boy occupies an especial place in hose gagography, a unique perch between comic strip hose gags and single-shot hose gag films. Released by Bamforth in 1887, along with a reading (to which I shall return shortly), it is both an unauthorized copy of Hans Schließmann's wordless four-panel comic strip, "Ein Bubenstreich/A Boyish Prank" (*Fliegende Blätter* #2142, August 15, 1886) and a previously overlooked lantern source for the Lumière's one-shot "vue comique," *Le Jardinier et le petit espiègle/The Gardener, the Bad Boy and the Hose* (1895), the title for the first version of *L'Arroseur arrosé* .[62] The correspondence between the comic strip, lantern series, and film is exact, from the horizontal and frontal composition, to

[62] Burch, *Life to Those Shadows*, 22, n. 8.

the arrangement of gardener left/boy right, to the three phases of the gag scenario: the initial situation, the complication or cause, and the resolution or effect. Indeed, apart from the variable fourth phase—the boy's gloating in the comic strip and lantern series and his receiving a spanking in the film—the three versions are identical.

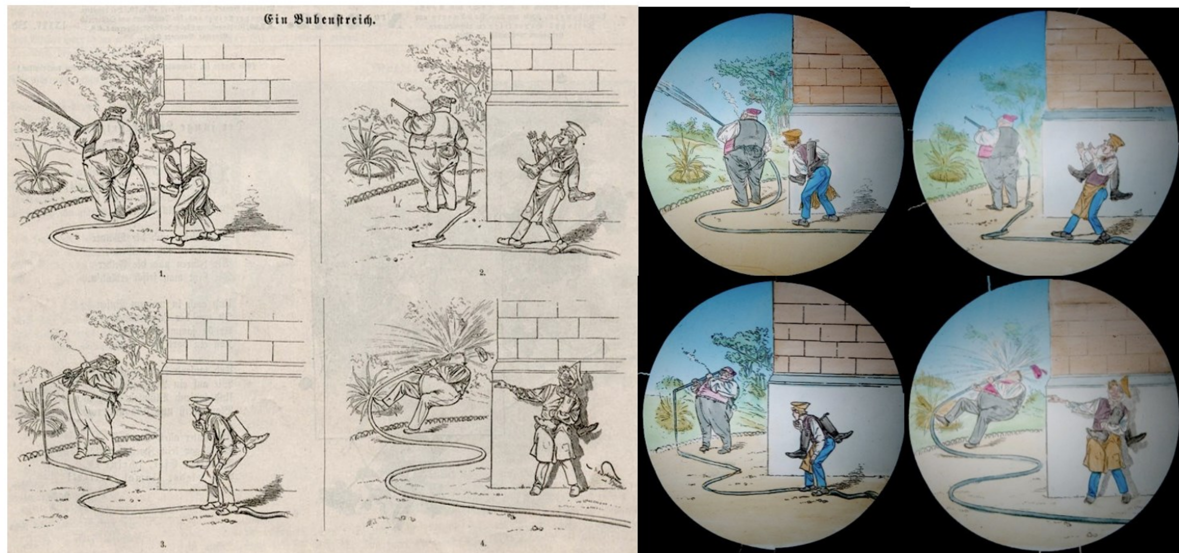

Figure 1.5. Hans Schließmann, "Ein Bubenstreich," *Fliegende Blätter* #2142, August 15, 1886 and Bamforth's *The Mischievous Boy* (1887)

The Mischievous Boy is also a model lantern gag in the sense that it perfectly demonstrates how the lantern handles gags. Not only is it anatomically correct—it adheres firmly to Havel's gag structure of exposition-antithesis-synthesis—but it is also closely allied with the aesthetic of late-nineteenth-century popular entertainments. First, its style is economical; the careful placement of the sky, garden, plants, wall, ground, characters, and hose leads the eye from the boy to the man and the nozzle, insuring the smooth development of the comic action across the images and the clean delivery of the gag. Secondly, its mode is presentational, as evidenced by the mischievous boy's direct address to the viewer while pointing at the explosive

result of his prank in the final image. Finally, given its general technique of slapstick, *The Mischievous Boy* is clearly aimed at comic impact.

Comic impact is integral to *The Mischievous Boy*'s design. If Louis Sullivan's famous maxim, "form ever follows function," holds true for lantern gags, then *The Mischievous Boy* is a case in point. Like all sight gags, it is governed by a basic structure of cause and effect, as its slide titles wittingly demonstrate:

1. Hatching a Plot
2. Cause and Effect
3. Looking for the Cause
4. A Sudden Effect

But the four slide titles also describe, in a rather generic way, *The Mischievous Boy*'s four phases of comic action, and in doing so, highlight the relationship between its images and structure: each of the images represents a stage in the gag's development. This image/phase of action design, in turn, reveals how the lantern gag treats time. The four images in *The Mischievous Boy* represent four temporally proximate phases of action, which unfold successively within a short time frame and in the same space. This consistent rendering of space across the images insures their registration in projection. As each image registers with and replaces the previous one within a continuous frame and setting, the actions of the man and boy merge with one another and are transformed into movement in the idiom of the lantern, or "movement in two directions," to invoke the title of Olive Cook's classic book.[63] *The Mischievous Boy* is, in fact, designed so that transitions between the images—particularly dissolves, achieved by throwing two images on the screen while simultaneously dimming and brightening the illumination in a double lantern—will enhance this effect of isolated movement, bridge the phases of comic action, and minimize

[63] Olive Cook, *Movement in Two Dimensions* (London: Hutchinson & Co., 1963).

temporal ellipses. It is designed, that is, to represent a quasi-continuous comic action in projection.

Thus*, The Mischievous Boy* illustrates an aspect of lantern grammar that dominates lantern gags: an on-screen mode of representation, or what I call the *lantern on-screen*. While this mode may seem patently obvious (when is the lantern not an on-screen entertainment?), it merits some discussion. In the lantern's on-screen mode, the projected image activates on-screen time and space while minimizing or nearly eliminating off-screen time and space. Given that each image represents a phase of the comic action, its screen time is able to align with the story time and plot time. So, an image in *The Mischievous Boy*—say the second image, showing the boy stepping on the hose and cocking a snook—can be projected so that its duration approximates and suggests the real time of that action.

The on-screen mode of lantern representation stands in sharp contrast to that of most story series, which employ an image-as-scene approach. In that mode, the image is designed to be projected for the duration of a scene and to represent many events in addition to the one depicted. For instance, the second image in one of the lantern versions of *Alice in Wonderland,* which corresponds to the first half of chapter two in Charles Dodgson's (Lewis Carroll's) *Alice's Adventures in Wonderland*, shows an enlarged Alice reaching down for the key on the table. It is meant to represent that event and many others we never see: Alice growing to nine feet high; Alice shedding gallons of tears; the White Rabbit running past Alice and dropping a fan and gloves; Alice fanning herself; Alice shrinking to a fraction of her original size; and Alice slipping into a salty pool of her own tears.[64] Because their images show a fraction of the scenes

[64] W. Butcher & Sons*, Alice in Wonderland: Chapter 1—Down the Rabbit Hole* (1905-1908).

they represent, lantern story series such as *Alice in Wonderland* rely on audience familiarity and external commentary to be intelligible in performance.

In the image-as-action approach of the on-screen mode, on the other hand, exhibition aids are not essential. The basic mini-narrative of *The Mischievous Boy*, itself based on a pantomime (wordless) comic strip sight gag, is intelligible on the level of the images alone. Thus, while lantern performance is, of course, an audiovisual form of entertainment involving music, sound effects, and external narration, comic lantern series like *The Mischievous Boy* only require brief, caption-like sentences per image/phase of action for the gag to "go over" to the audience. Given the mischievous boy's direct address to the audience in the fourth image and in keeping with the presentational logic of the gag, a performer can decide to deliver four short lines from the prankster's point of view, and in the present tense:

1. The old geezer's at it again. I think I'll have some fun with him today…
2. N*ah-nah NAH na* naaaah-nah…
3. That's right, keep looking for the blockage…
4. Haha! The waterer's getting watered!

Likewise, only minimal sound effects and music—the sound of spraying water, a note or two for the fateful stepping on and off the hose, a crashing chord for the water explosion—are needed to enhance *The Mischievous Boy*'s inherently comic effects. Indeed, anything but spare external narration and minimal music will water down the series' comic impact.

Bamforth's "short lantern reading" for *The Mischievous Boy* both reveals the variability of the series and reaffirms that it is a gag presented in the language and style of the lantern. The text adopts a considerably different approach to the series. It is considerably longer than my suggested commentary (nearly ten times longer) and assumes the point of view of a third-person omniscient narrator, the past tense, and the form of metered verse:

> 1. A jolly old codger whose stern was as round / As ever an ancient Dutch galliot was found, / Was busy within his large garden one day / Refreshing his flowers with showers of spray. / In order to make the work pleasant and light, / He'd fixed a long hose to the main, very tight, / And, holding the long brazen pipe by the nose, / Could send out the water wherever he chose. / A mischievous urchin was strolling that way, / And stopped for a moment to see the jet play; / Then saw what a chance he had got for a joke, / Which soon might be played on the jolly old bloke.
>
> 2. The rascal then planted his foot on the hose, / And spread out both hands at the end of his nose— / A sign of defiance—quite vulgar you know— / Which children who know good behavior don't do. / The gentleman soon found his water cut off, / While just round the corner the youngster did scoff; / The hose loosely lies flat and limp on the ground, / Where a moment before it had lain firm and round.
>
> 3. And so the old gent was compelled now to stop, / For out of the nozzle there came not a drop; / And so this conclusion he came to at last, / That something—a frog perhaps—there had stuck fast. / He shook it,—he knocked it,—but nothing came through ; He blew down, but still 'twas no sort of a go; / At last the long nozzle he placed to his eye, / And then the boy thought it was time to let fly.
>
> 4. And some of the mischief he wrought you may see, / But much of the terrible catastrophe / That befell the old man I must leave you to guess; / But soon he was found in a horrible mess. / I can't truly say he was floating about / The pool he had made, he was rather too stout; / But when he got up the soft water did ooze / From out of his trousers, his pockets, his shoes. / It taught him a lesson he never forgot— / And so it may you if you choose to be taught— / Don't look down a tube, or a gun-barrel, or spout, / Unless there's a chance to see what may come out.[65]

Clearly, Bamforth's published reading does not accord with *The Mischievous Boy*'s presentational-economical aesthetic. Instead of showing the event, it describes it; instead of offering a few spare lines of prose, it provides several long paragraphs; instead of delivering a punch line, it conveys a moral. In short, the reading runs counter to the comic aims of the gag.

How are we to read *The Mischievous Boy* vis-à-vis Bamforth's reading? First and foremost, we need to consider the nature, history, and purpose of the reading itself. Bamforth's text is a commercially published lantern reading, which was produced as a supplement to the

[65] "The Mischievous Boy," in *Short Lantern Readings 3* (Holmfirth: Bamforth & Co., 1887), 16–17.

slide series as a means of marketing it to amateurs and juveniles. The practice of publishing readings, which began in the 1820s with the mass production of Philip Carpenter's copper plate sliders (his 1823 "Elements of Zoology" is likely the first commercial reading), became more widespread in the 1870s with the increased production of parlor lanterns (especially the multi-wick Sciopticons) for private use.[66] During the heyday of the British slide manufacturing trade—from the 1880s to the First World War—commercial readings were produced in a number of formats, the most common of which were short pamphlets accompanying specific lectures or story sets, compilation books encompassing part or all of the stock of dealers or manufacturers, and single-page leaflets boxed with children's sets.[67] Whether produced in tandem with educational slide sets, adapted to pre-existing stories like *Alice in Wonderland*, or written for pre-existing slides like *The Mischievous Boy*, published readings were, as Richard Crangle notes, "part of a 'home entertainment package' that a dealer would supply to a middle-class father: a lantern, some slides to show the family, and readings to allow him to appear like a professional showman or lecturer."[68] Accordingly, readings such as Bamforth's supplement for *The Mischievous Boy* can offer insights into the performance, consumption, and social functions of the lantern in the domestic sphere, as recent studies have shown.[69]

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[66] Trevor Beattie, "Carpenter and Westley: Their History and Artistry," *New Magic Lantern Journal* 11, no. 4 (March 2013): 6–10.

[67] Richard Crangle, "How to Read a Lantern Reading," *New Magic Lantern Journal* 9, no. 6 (Summer 2004): 89. Bamforth's *Short Lantern Series*, which it produced from 1887-1908, typically included readings for around seven slide sets.

[68] Crangle, "How to Read a Lantern Reading": 90. Bamforth's comic verses were penned by Robert Craven, who authored some 150 poems for slide sets between 1887 and 1896.

[69] See, for instance, Shaylyn Claggett, "The Animal in the Machine: Punishment and Pleasure in Victorian Magic Lantern Shows," *Nineteenth-Century Contexts* 40, no. 1 (2018): 1–18.

Secondly, we need to consider the fact that Bamforth's reading does not shed much light on *The Mischievous Boy*'s screen life beyond the amateur-domestic context. It does not, for instance, inform us of the ways the series was performed by professional lanternists whose commentary was often improvised. Nor does it indicate how *The Mischievous Boy* was exhibited within mixed bills where it could provide comic relief following a heart-wrenching temperance series. It also does not reveal how it was consumed by public audiences, some of whom would have familiarity with the hose gag from comics.

But the reading does elucidate *The Mischievous Boy*'s narrative nature, albeit indirectly. While it appears to indicate a wider range of textual variation and more varying degrees of narrativity than those of the images alone, it actually reveals the opposite. Instead of transforming *The Mischievous Boy* into a more developed narrative, the descriptive comic verse merely overextends the comic actions. It stretches the duration of image projection past the length of the represented events, and in so doing, exposes the series' narrative limits. Notwithstanding the relative flexibility and variability of the lantern form—its ability to stretch or compress time—the reading shows that the mischief lantern gag is not, as Gunning argues with regard to mischief gag films, a building block or template for a longer, character-driven comedy.[70] As with mischief gag films, it lacks developed characters and situations. Accordingly, it hovers between non-narrative lantern attractions like the movable comic view, "Boy Riding Pig" and longer lantern narratives like *Alice in Wonderland*. To paraphrase Gunning, brevity is the soul of the lantern gag.

[70] Gunning, "Crazy Machines."

The Mischievous Boy thus steers our discussion back to the question of the lantern gag's relation to comic-strip gags and single-shot gag films. Here, it is a lantern gag par excellence. It directly transposes the comic strip, *Ein Bubenstreich*, and in doing so exemplifies not only the lantern's promiscuous borrowing from comics, but also and especially its witty selection of comic strips that accord with the lantern's on-screen mode of representation. While contemporary hose-gag comics by Uzès, Vogel, and Christophe have shifting angles, inconsistent perspectives, and superfluous panels, Schließmann's version is extremely clear and economical. *Ein Bubenstreich*'s frontal and horizontal presentation, continuity of framing and background, and one-to-one correspondence between panels and stages of development guarantee the smooth delivery of the gag on the screen as well as the page.

The Mischievous Boy's transposition of *Ein Bubenstreich* also entails a process of transformation. In the comic strip, where meaning is produced between the reader and the page, the gag's stages of development are distributed across panels that can be read separately or viewed at the same time. In the lantern series, where meaning is produced between the audience and the screen, the stages are distributed across projected images, which register and dissolve into one another in the same screen space. *The Mischievous Boy* thus transforms *Ein Bubenstreich* from a four-panel comic strip into a quasi-continuous on-screen event, and from the "sequential art," as Will Eisner defined it, or "the art of succession," as Gunning terms it, to what I call the *art of registration*.[71]

This double operation of transposition and transformation is, of course, also characteristic of early film. In transposing *The Mischievous Boy*, *L'Arroseur arrosé* transforms the hose gag

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[71] Tom Gunning, "The Art of Succession: Reading, Writing, and Watching Comics," *Critical Inquiry* 40, no. 3 (Spring 2014): 36–51.

into what Gunning calls the "art of motion."[72] However, in so doing, it conforms to the logic of the lantern gag—a presentation of the successive stages of a comic action across a series of images registered within a consistent frame. Indeed, both the single-shot film and lantern versions deliver the hose gag as a continuous on-screen event of a brief duration; only their means are inverted: *The Mischievous Boy* distributes the four phases of action across four images and joins them in projection, and *L'Arroseur arrosé* blocks and stages the four phases of action and joins them in cinematography. One can find this lantern-gag logic at play in a wide range of single-shot gag films produced during the first decade of cinema, from G. A. Smith's *Hanging Out the Clothes* (1897) to Edison's *The Unappreciated Joke* (1903). Indeed, in the "Comedy" section of Biograph's "Photo Catalogs," so elegantly designed with three frames for each film, the logic of the lantern gag is applied wholesale.

Hence, *The Mischievous Boy* takes giant steps in helping to clarify misconceptions concerning the lantern-film relation. It shows, for instance, that continuity of action was not "embryonic at best in the static lantern show," but well developed in lantern gags.[73] Comic series like *The Mischievous Boy* were designed to present temporally unfolding cause and effect actions across series of projected images. It also challenges the notion that the lantern did not influence motion pictures until after 1900, when films were elaborated into multi-shot narratives, an understanding based on an assumed one-to-one correspondence between lantern slides and shots. While longer lantern narratives like *Alice in Wonderland* tend to represent scenes with single

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[72] Tom Gunning, "Loïe Fuller and the Art of Motion: Body, Light, Electricity, and the Origins of Cinema" in *Camera Obscura, Camera Lucida: Essays in honor of Annette Michelson*, ed. Richard Allen and Malcolm Turvey (Amsterdam: Amsterdam University Press, 2003), 75–90.

[73] Charles Musser, "The Early Cinema of Edwin Porter," in *Cinema 1900-1906: An Analytical Study*, ed. Roger Holman (Bruxelles: FIAF, 1982), 273.

images (a pattern followed by Cecil Hepworth and Percy Stow in their 1903 film version of sixteen scenes), lantern gags like *The Mischievous Boy* represent single comic events with multiple images. By extension, *The Mischievous Boy* also challenges another commonly held view, again based on the presumed one-to-one ratio of images and shots, that "comic-strip narrative codes" did not have a significant impact on early filmmakers.[74] Schließmann's *Ein Bubenstreich* and other wordless comics, which appeared on the pages of *Fliegende Blätter*, *Life*, and *Puck* in the late 1880s and early 1890s, often did influence the structure, style, or form of lantern gags, which in turn, influenced single-shot gag films.

One could therefore argue that *The Mischievous Boy* is a kind of "missing link" between comics and early film, a key step in the evolution of screen comedy. However, to do so would be to reinforce the very narratives of linearity and causality that lantern gags challenge. *The Mischievous Boy* is, of course, an important source for *L'Arroseur arrosé*, but I don't consider it a proto-single-shot gag film; after all, both the lantern series and the Lumière film were circulating in 1895. Rather, I regard the lantern and film versions, following Thomas Elsaesser, as family relations that belong together but are "neither causally or teleologically related to each other." As Elsaesser has argued, "Cinema did not relate to the magic lantern in strictly causal terms nor did it 'respond' to it by solving problems that had arisen in the practice of magic lantern shows. It re-purposed aspects of magic lantern technology and parasitically occupied part of its public sphere."[75] But was the lantern, while co-occupying the public sphere with early

[74] Crafton, *Before Mickey*, 37. See also Donald Crafton, *Emile Cohl, Caricature, and Film* (Princeton, N.J.: Princeton University Press, 1990), 225.

[75] Elsaesser, "The New Film History as Media Archaeology," 88.

cinema, influenced by motion pictures? To explore this more interesting and productive question, we need to investigate the history and style of lantern-film production.

Lantern-film Production - A Brief Prehistory

> Item: This season a new departure has been made, namely, in supplying life-model slides of a humorous nature; hitherto these have been made only from drawings, mainly from the pen of Mr. Bamforth, but there is no doubt that this new departure will be welcomed by the lantern world.[76]
>
> Item: From time to time many new sets of slides are introduced by the well-known firm of Riley Brothers, Ltd., 55 and 57, Godwin Street, Bradford, Yorks, and for the coming season this firm have some excellent sets, including great towns of Great Britain, 50 slides … Several popular songs are also illustrated, the Chokee Bill series of cinematographic film pictures, and several beautiful lace and other new curtain slides.[77]

These seemingly unrelated announcements published in *The Photographic Dealer* and *The Optical Magic Lantern Journal* at the beginning of the 1899–1900 Lantern Season constitute the publicity these lantern-film productions received at their debut, and their reference is oblique—indeed, very oblique. For among Bamforth's new "life-model slides of a humorous nature" and Riley's new "Chokee Bill series of cinematographic film pictures" were the lantern series, *Bobby's Flirtation* and the film, *The Tramp and the Baby's Bottle*, or *Chokee Bill and the Baby*. Together, they comprise the scene at the park bench that ignited our exploration and set it in motion: an unprecedented and as-yet never repeated joint creation based on the same gag, featuring the same cast, and shot in the same location. *Bobby's Flirtation*/*The Tramp and the Baby's Bottle* is one of a handful of lantern-film productions made by Bamforth between 1899 and 1901. During their short run, they were both a new addition to the market and, as I shall

[76] "How Life-Model Lantern Slides are Made," *The Photographic Dealer* 7, no. 41 (October 1899): 105.

[77] *The Optical Magic Lantern Journal* 10, no. 125 (October 1899): 138–39.

show, substantially more. The connection between *Bobby* and *The Tramp*, however, was not mentioned in the trades, advertisements, or catalogues. In fact, if it were not for the slides and film themselves where the exact correspondence between them is readily apparent, we would never know that lantern-film production happened.

How are we to understand this omission? A likely if general explanation is that lantern-film production would not have stood out in the screen world of c. 1900, a world typified by lantern-film hybridity. During the brief prehistory of lantern-film production in Great Britain, where the lantern industry was arguably most developed, this hybridity characterized nearly every aspect of the field, from technology, to exhibition, to "content." Combined slide-cinematograph magic lanterns were available from 1896, when lanterns with interchangeable film projectors and lantern lenses were introduced, and by 1900 they were capable of accurately superimposing the "Living Picture" and the "Lantern Picture" on the screen at the same height "without loss of light;" that is, they seamlessly alternated films and slides.[78] Some film projectors were even designed so that they could be inserted in the manner of vertical mechanical slides. Cecil Wray's "compact apparatus" of 1896, for instance, was "capable of insertion in an ordinary lantern stage," and thus of transforming standard and biunial lanterns into combination slide-film projectors.[79] Triunial lanterns fitted with film projectors at the bottom stage could project

[78] W. C. Hughes' Photo-Rotoscope, as advertised in *The Optical Magic Lantern Journal* 11, no. 139 (December 1900): ix.

[79] Henry Vaux Hopwood, *Living Pictures: Their History, Photo-Reproduction and Practical Working, with a Digest of British Patents and Annotated Bibliography* (London, 1899), 245.

dissolving views with the first two systems, and motion pictures, often referred to as "cinematograph slides," with the third.[80]

Lantern work—the work of professional lanternists at the end of the century—typically involved showing films and slides together, and these exhibitions, given during the "established 'Lantern Season,' from October to March," were, as Nicholas Hiley notes, "regarded as sophisticated magic lantern shows."[81] Many lanternists became filmmakers, and some of them combined lantern slides and films to great effect. In 1897, Cecil Hepworth incorporated his own slides and a handful of Robert Paul's films to create "a few short series having a 'story content,'"[82] In one of these series, his oft-cited performance of *The Storm*, he depicted a tempest brewing across a series of his own slides taken off the coast of Deal and culminating in a film of waves breaking against the rocks in Portugal, Paul's *A Sea Cave near Lisbon*. Other showmen made their own film versions of "motto" slides, which carried wording pertaining to the presentation of the entertainment. In 1898, the celebrated lanternist, C. Goodwin Norton, for instance, produced his own single-shot films, *Shop* and *Good Night. Shop* shows a boy pasting an advertisement for "Animated Photographs C. Goodwin Norton" on Norton's shop window, and in *Good Night*, a man closes the shutters of a shop, on which are displayed the words "Good Night." It is likely that Norton used these films to open and close some of his expanded lantern exhibitions.

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[80] "Wrench's Jubilee Cinematograph Slides," *The Optical Magic Lantern Journal* 8, no. 100 (September, 1897): 143.

[81] Nicholas Hiley, "Great Britain," in *Encyclopedia of Early Cinema*," 282.

[82] Cecil Hepworth, *Came the Dawn: Memoirs of a Film Pioneer* (London: Phoenix House Limited, 1951), 31.

A number of narratives were shared by Life Model slide sets and motion pictures. While many depicted well-known fairytales, narrative poems, and temperance tales in the "tableau style" of the lantern and early film (the subject of the following chapter), some imitated popular gags. W. Rider & Co.'s *The Comical Whitewasher* (1897) and G. A. Smith's *The Miller and the Sweep* (1897), for instance, are both variations on the black and white gag: a miller or whitewasher dressed in white and a chimney sweep dressed in black encounter one another. A battle ensues, during which the sweep covers the miller/whitewasher in black soot and the miller covers the sweep in white flour or whitewash; thus their appearances are reversed. The gag itself, which had been circulating on the music-hall stage and the lantern screen since the 1880s, was adapted to a number of situations. In Professor Daltrey and Corporal Higgins' comic sketch, *The Sweep and the Miller* (1883), "black" and "white" fight over the hand of a housemaid.[83] In Bamforth's non-photographic series of ten slides, *The Whitewasher and the Sweep* (c. 1888), the men meet at a house where they are engaged to work, exchange their powdery blows at the chimney on the roof, and meet again downstairs. In York and Son's *The Miller and the Sweep* (c. early 1890s), another series of ten drawn/painted slides, the miller and sweep collide, spar, and part on the street.

Rider's Life Model series and Smith's motion picture both rework preexisting versions of the black and white gag. *The Comical Whitewasher*, essentially a remake of Bamforth's series, represents the phases of the comic action across nine photographic slides, with models posed in front of studio sets. *The Miller and the Sweep*, which corresponds most closely to York and Son's series, depicts the action in a single shot, filmed in front of an operating windmill. Yet

[83] Frank Gray, "George Albert Smith's Comedies of 1897," in *Pimple, Pranks & Pratfalls: British Film Comedy Before 1930*, ed. Alan Burton and Laraine Porter (London: Flicks Books, 2000), 21.

while the Rider Life Model series and the Smith film imitate earlier lantern versions, they also innovate. *The Comical Whitewasher* adds images of the sweep at the fireplace and cleverly intercuts between them and the images of the whitewasher on the roof, establishing spatio-temporal continuity through the cause and effect action that takes place at both ends of the chimney. *The Miller and the Sweep* inventively adds a chase after the miller and sweep exit frame left, in which a small crowd entering frame right runs through the shot suggesting "an *elsewhere,*" as Burch notes, "that could be linked to that space by a relation of spatio-temporal succession."[84] Taken together, *The Comical Whitewasher* and *The Miller and the Sweep* highlight another aspect of the hybrid lantern-film environment into which lantern-film production was born unnoticed.

Figure 1.6. *The Whitewasher and the Sweep* (Bamforth, 1888), *The Comical Whitewasher* (Rider, 1897), *The Miller and the Sweep* (York & Son, 1890), and *The Miller and the Sweep* (G. A. Smith, 1897).

[84] Burch, *Life to Those Shadows*, 148.

But the prehistory of lantern-film production is also tied to the specific region of West Yorkshire and to the particular relationship between the James Bamforth firm of Holmfirth and the Riley Bros. firm of Bradford. Their founders, James Bamforth and Joseph Riley, established in the 1870s as a portrait photographer and a "stuff" (textile) merchant, respectively, began doing business together in the 1880s, when the former became a lantern slide manufacturer and the latter a lantern outfitter dealing in the former's slides. In the following decade, both firms grew rapidly. Bamforth began specializing in fictional Life Model narratives, which were planned during the winter and produced inside his glass-roofed studio during the summer.[85] Riley expanded its "loan slide department" and began manufacturing "Praestantia" lanterns and "Lawson" saturators. By the mid-1890s, Bamforth was averaging several dozen new Life Model series a year, while Riley, having established offices at 16 Beekman Street, New York, in 1894, was offering the largest stock of new slide sets for hire as well as all manner of lanterns, accessories, and slides for sale.

By 1895, most of the younger generation of Rileys and Bamforths were actively involved in the firms' day-to-day operations. Joseph Riley's sons (Herbert, William and Arnold) were partners, and James Bamforth's children (Harry, Walter, Fred, Frank, Lizzie, Edwin, and Jane) were in some way "magic lantern slide makers"—photographers, photographer's assistants, directors of models, and models. This younger generation was keenly interested in motion pictures from their emergence, and they were probably most directly engaged in the production of Riley's and Bamforth's films. Joseph's son, William (Willie) Riley, who ran the lantern

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[85] See "Life Model Studies: I – a peep behind some scenes," *The Photogram*, 6 (February 1899): 46-48.

business, traveled to Paris to attend a Lumière program in the winter of 1895–96 and involved the firm in developing cinematographic equipment shortly thereafter. In the spring of 1896, Riley acquired the rights to a projection device invented by Bradford-based electrical engineer, Cecil Wray, and by the end of the year he was manufacturing "Wray's Kineoptoscope" projectors, which could be purchased with their Praestantia lanterns, and various films in "either 40 or 75 feet lengths."[86] In 1897, Riley made what may have been their first motion picture, *Queen Victoria Visits Sheffield*, filmed on May 21. By October, the beginning of the 1897–98 lantern season, the firm was offering three different combination "Riley's Kineoptoscope" projectors in addition to the original model, a " Riley's 'Kineoptoscope' cinematograph," as well as "Films. Our own make supplied. Wholesale and Retail. Good subjects. Steady motion. All other makers' films supplied. Write for Kineoptoscope pamphlet, free on application."[87]

Meanwhile, James Bamforth's son Harry started giving motion picture exhibitions. Harry Bamforth's exhibitions appear to fall into two categories: regional programs presented in public or in town halls rented for this purpose, and local charity shows. As an itinerant "town hall showman," he exhibited motion pictures, reputedly with phonograph accompaniment, in a number of cities in the Yorkshire region, from Manchester to Sheffield to Leeds.[88] As a local lanternist, he also exhibited motion pictures in the Holmfirth and Huddersfield area where giving local charity shows was a fairly common aspect of lantern work. In January 1898, he showed

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[86] John Barnes, *The Beginnings of the Cinema in England 1894-1901 – Volume 1: 1894-1896* (Exeter: University of Exeter Press, 1998), 166.

[87] *The Optical Magic Lantern Journal* 8, no. 100 (September 1897): xviii.

[88] Toulmin, "Cuckoo in the Nest," 55. According to Toulmin, town hall shows, fairground shows, and music hall programs were the three main forms of temporary motion-picture exhibition within which the early British film industry developed in central and northern England.

"cinematograph views" at the Holmfirth Parish Church's annual parochial gathering, which included films "'wise and otherwise,' and proved very popular with the audience."[89] In March 1898, he provided the "cinematograph entertainments" for the "Oriental Bazaar" at the Fartown Trinity Wesleyan Church in Huddersfield, a daylong fundraiser for the purchase of a new church organ.[90] And in January 1899, at the "annual treat to the aged and poor in the parish of Lockwood," he showed "nearly thirty films"—a rather large number at that time—"and the living pictures which were thrown upon the sheet excited much wonder and admiration, and were intensely amusing to the whole company."[91] Given the longstanding business relationship between the Riley and Bamforth firms and Riley's ready supply of outfits for motion picture exhibition, it is likely that Harry Bamforth showed a good percentage of Riley films, possibly with one of their projectors.

In 1898, Riley stepped up their film production considerably, releasing over twenty films, which were distributed by the Warwick Trading Company.[92] The vast majority of them are nonfiction subjects: topicalities (*March Past of the Black Watch*); actualities (*A Switchback Railway*); performers' acts (*Joe Darby in his Various Jumps*); and miscellaneous children's scenes (*Skipping Rope Contests*). But four films are of a different order altogether—they are short fiction subjects and likely the first "RAB" films (as they were subsequently advertised in

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[89] *The Huddersfield Chronicle*, Saturday, January 1, 1898, 7.

[90] *The Huddersfield Daily Chronicle*, Wednesday, March 23, 1898, 3.

[91] *The Huddersfield Daily Chronicle*, Friday, January 20, 1899, 3.

[92] For a list of the Riley films offered by Warwick in December 1898, see Barnes, *The Beginnings of the Cinema in England 1894-1901 – Volume 3*, 187-89.

the 1903 Hepwix catalogue), commissioned for sale to purchasers of their Kineoptoscope projectors.

Although the precise business arrangement between the Rileys and the Bamforths is not known, the films themselves were reputedly made with Riley's camera, directed by Frank Bamforth, James' son, who took charge of Bamforth & Co.'s slide and postcard photography in the 1900s They were photographed by Clemence Winterman, who was later employed as a photographer at Bamforth.[93] Frank Bamforth and Winterman were also involved in amateur theatricals.[94] James's daughter, Jane Bamforth, was the "dresser-props-continuity girl," and her sister, Lizzie, who posed in many of Bamforths' Life Model series and who married Winterman in 1899, may have played a role as well.[95] James Bamforth himself, generally assumed to have been the director, was also producing nearly sixty Life Model sets in the new extension to the Holmfirth studio during the summer of 1898 and was thus probably only indirectly involved in the film production.

Based on their titles and catalogue descriptions, the fiction subjects released by Riley and produced by Bamforth in 1898 are very much in keeping with the comic narratives circulating in the music hall sketches, comic strips, lantern performances, and motion pictures in late-Victorian Britain. They depict instances of delinquency, insubordination, and misbehavior, in which

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[93] Herman Hecht, *Pre-Cinema History: An Encyclopaedia and Annotated Bibliography of the Moving Image Before 1896*, ed. Ann Hecht (London: Bowker-Saur, 1993), 553.

[94] See *The Huddersfield Chronicle*, Monday, April 22, 1895, 3; and *The Huddersfield Chronicle*, Saturday, June 1, 1895, 8. Frank Bamforth managed the limelight and scenic effects for four large-scale productions (some with a cast of fifty actors and an orchestra of twenty-four pieces) of the Holmfirth Amateur Dramatic Society: two farces, "Burglar and the Judge" and "Turn Him Out," and two dramas, "Honor before Wealth" and "Noémie," in which Winterman played the part of Count D'Avriguy.

[95] Frederick Alderson, *The Comic Postcard in English Life* (Newton Abbot: David & Charles, 1970), 14.

bourgeois conventions are temporarily subverted. In other words, they are single-shot gag films featuring mischievous boys and tramps. The first RAB films are *The Schoolmaster's Portrait*: "Boy draws caricature of his teacher on blackboard, and is caned"; *The Runaway Knock and the Suffering Milkman*: "Boys knock at door and run away so milkman takes blame"; *The Nursemaid's Surprise*: "Tramp changes places with baby and is caressed by its nurse"; and *Weary Willie in the Park, or, The Overfull Seat*: "Tramp frightens four people off park bench."[96] Among them, only *Weary Willie in the Park; or, The Overfull Seat* has survived.

Although *Weary Willie* borrows its title from Tom Browne's popular comic strip, *Weary Willie and Tired Tim*, which first appeared in the halfpenny weekly, *Illustrated Chips* in 1896, it in fact transposes a previously overlooked comic strip from across the pond: American cartoon artist E. M. Howarth's "The Reward of Enterprise," published in 1890 in *Life* magazine.[97] Howarth's strip presents a park bench gag that unfolds across six panels/phases of action. In the first panel, four people are seated on the bench as a tramp approaches. In the second panel, the tramp is sitting on the end of the bench and startling the man sitting next to him. The man is walking away in the third panel, and the tramp, who has moved down the bench, is now seated next to a woman. The fourth panel shows the woman leaving as the tramp has moved next to a portly man. In the fifth panel, the portly man exits as tramp is sitting next to the last man on the bench, who has been reading a newspaper. In the sixth and final panel, the last man exits and the tramp, having obtained the bench for himself, is lying down and relaxing. Apart from the fact

[96] This list of films and the catalogue descriptions are drawn from Dennis Gifford, *The British Film Catalogue 1895-1985*.

[97] *Life* 16, no. 408 (October 23, 1890): 222–23.

that the film features two women rather than one and shows the tramp smoking a cigarette (he blows smoke in the people's faces), the transposition is complete.

But a closer look at *The Reward of Enterprise* and *Weary Willie* reveals that the former is not only the comic strip source for the latter, but also its *shooting plan*. Indeed, *Weary Willie* goes to somewhat unusual lengths to realize *The Reward of Enterprise*'s design. For instance, in the first panel of the comic strip, the tramp is shown approaching the group from an area a few feet behind the left corner of the bench. In the film, the bench is placed along a horizontal path in a park, behind which are trees and bushes, and is cheated camera right, so that its left end extends into a perpendicular path. The only explanation for this odd placement of the bench is that *Weary Willie* is faithfully replicating the tramp's approach in *The Reward of Enterprise*'s first panel.

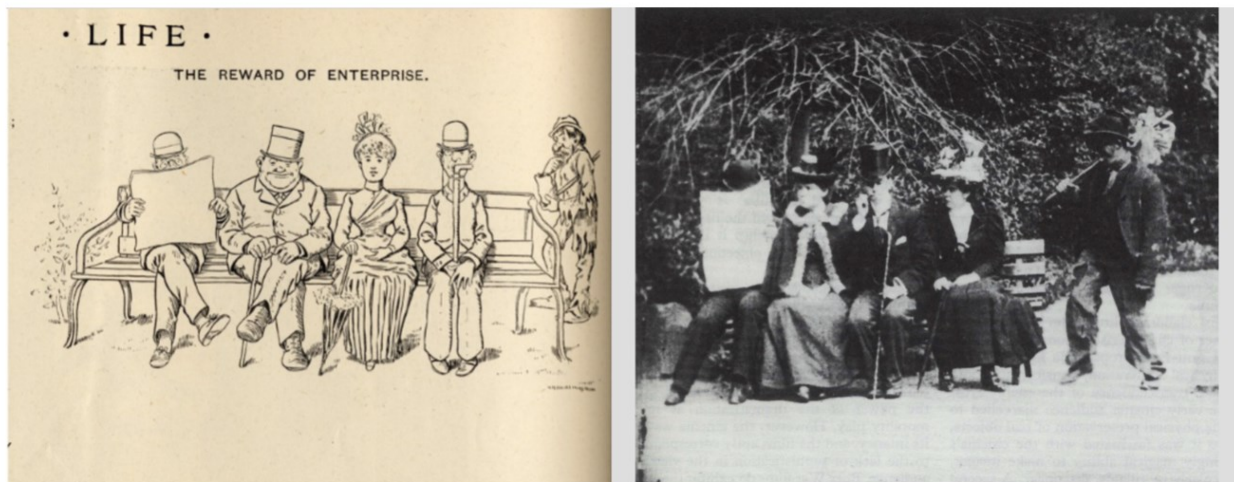

Figure 1.7. Howarth's *The Reward of Enterprise* (1890) and Bamforth's *Weary Willie* (1898)

The film continues to match the following stages of the comic action with the next five panels of the comic strip and joins them in a continuous take. This joining, however, entails filming the movements between the panels, which are not shown in Howarth's strip-cum-shooting plan. *Weary Willie* solves this problem by treating the interstices between panels—

when the tramp slides down the bench frame left, when the people get up and exit frame right—as if they were transitions between images in a lantern gag. In other words, the film does not add any action between a given pair of panels, but merely extends the movement initiated in one panel and completed in the next, bridging the phases of action in the manner of a lantern dissolve.

Thus *Weary Willie* transforms *The Reward of Enterprise* into a motion picture by preparing and delivering it according to the logic and style of a lantern gag: it integrates multiple and consecutive phases of a comic action into a single event and presents it within a frontal and horizontal frame and a uniform setting. Given their experience in translating comic strip gags into lantern gags, the Bamforths would probably have produced *Weary Willie* with a hypothetical lantern intermediate in mind, if not an actual lantern companion in hand. To the best of my knowledge, however, they did not offer a lantern version of Howarth's strip, nor did they produce a Life Model companion to *Weary Willie*. But even if they had, the pairing would have been governed by the lantern-gag style from which their subsequent lantern-film productions deviate. *Weary Willie* did, however, provide the Bamforths with the necessary experience of producing *lantern gag films*—single-shot gag films in the style of lantern gags—and thus served as significant preparation for the "new departure" that took place in the summer of 1899.

Women's Rights

At last we arrive in the domain of lantern-film production. What does this arrival entail, exactly? Does it merely involve the manufacture of new Life Model series of a "humorous nature," as Bamforth proclaimed, or the production of Life Model series and motion pictures from the same profilmic events, as I have described? To be sure, Bamforth's jointly produced Life Model sets

and motion pictures depart from their previous productions in both respects. Yet, at the same time, they remain within the general categories of lantern gags and gag films. Is not lantern-film production, then, simply another illustration, however unusual and unknown, of the now accepted formulation of media change? As a number of scholars have shown, during periods of pronounced transition, new media do not immediately displace old media. Rather, the new and the old coexist for a period of time, as the new subsumes the old and the old takes on new functions. What sets lantern-film production apart from previously recognized instances of lantern-film co-minglings of, say, early film's cohabitation of the lantern *dispositif*, motion picture appropriations of lantern stories, or the introduction of illustrated songs and advertising slides in motion picture theatres? Why are they any more compelling than these other "cross-media joinings and borrowings?"[98]

Lantern-film production deserves our special attention because it is marked by a number of formal and stylistic departures that, taken together, transport the lantern to uncharted territory. This is a Lilliputian terrain, accessible only by enlarging the timeline of screen history and zooming in to examine Bamforth's corresponding slide series and motion picture productions of 1899–1900. Here, the importance of lantern-film production becomes patently clear. It reveals the startling fact that lantern and motion picture narration could and briefly did evolve in tandem and through a similar process of continuity and change. On the one hand, they were undergirded by the anatomy of gags and the logic of lantern gags; on the other hand, they experimented with camera angles, shot scale, and editing. For the lantern, this experimentation represented

[98] David Thorburn and Henry Jenkins, introduction to *Rethinking Media Change: The Aesthetics of Transition*, ed. David Thorburn and Henry Jenkins (Cambridge, MA: MIT Press, 2004), 3.

something of a threshold—a break with established models of slide set production, a response to motion pictures, and an exploration of new spatio-temporal relationships.

At the heart of lantern-film production, then, is a symbiotic relation between the lantern and motion pictures, which (I believe) has great relevance for the project of rethinking media change. By shedding light on this symbiosis, these joint productions provide a much-needed corrective to accounts of old-new media relations, which assume that processes of transformation and development are the sole purview of new media. Here, in fact, the old medium is as imitative and experimental as the new. Rather than conforming to the prevailing explanations of its fate—expiring, persisting in its usual ways, making itself useful in other contexts—the lantern undergoes a small-scale metamorphosis. In the process it inspires, is influenced by, and even advances beyond motion picture narration. By demonstrating the ways in which old media can renew themselves in moments of rupture, lantern-film production helps us to move from understandings of media transition that are based on explanations of supercession and determinism to those illuminated by models of superposition and reciprocity. It allows us to consider old media in a new way.

The reciprocity between the lantern and motion pictures is manifest in Bamforth's curious lantern film, *Gossips and Eavesdroppers*/*Women's Rights* (1899). It begins with a lantern source: a comic lantern series, also by Bamforth, ironically entitled *Women's Rights*. First produced c.1887 and in circulation until c. 1914, *Women's Rights* is very much in keeping with the aesthetic and style of our model lantern gag, *The Mischievous Boy* (and is quite possibly also based on a German comic strip). The images are drawn and painted, the presentation is frontal, the background is constant, and the comic action is centered on an object—in this case, a fence, which extends across the composition, creating a wide horizontal band between sky and ground.

As with *The Mischievous Boy*, it was offered with an accompanying reading, again penned by Craven and published in *Bamforth's Short Lantern Readings 3*, which provides a paragraph of descriptive comic verse per slide. Unlike *The Mischievous Boy*, however, the comic action unfolds across six images and takes place in the two spaces, the front and back sides of the fence. And unlike the lantern gagography I've been sketching more broadly, its humor is not based on the antics of mischievous boys and tramps, but rooted in gender politics, or as it was known in the Victorian era, "The Woman Question": the problem specifically of women's suffrage and more broadly of the status of women in the public and domestic spheres.

In *Women's Rights*, two women are forced to bear the brunt of a cruel, and by today's standards, misogynist joke. While they complain about their lack of "common rights," a man and a boy fish the hems of their skirts through a gap between the fence's planking and nail them to the wood. Thus the series traffics in anti-feminist humor, which expressed the backlash against feminist advances in the nineteenth century. In Britain, the question of women's suffrage had been in the air since the publication of Mary Wollstonecraft's treatise, *A Vindication of the Rights of Woman* in 1792. The demand resurfaced in 1832, when Yorkshire resident Mary Smith petitioned Parliament. By 1867, when the Manchester National Society for Women's Suffrage was formed, single-panel, anti-suffrage cartoons were circulating in Britain (*Punch*), New York (*Currier and Ives* lithographs), and Germany (*Fliegende Blätter*). Produced twenty years later (and forty years prior to the passing of The Representation of the People Act, which granted the right to vote to everyone over the age of 21), *Women's Rights* treats the Question as a farce, ripe for ridicule. It derives its humor from the fear that women's emancipation will lead to the transgression of traditional social roles: when the women assert their rights, the men teach them a lesson.

Thus *Women's Rights* is a kind of retrograde battle of the sexes gag, in which the men are the victors. Its design, however, is rather innovative. It structures the comic action by alternating between two sides of the fence: the women's side in image one, the men's side in images two to five, and the women's side in image six. In the first image, "In earnest discussion," Mrs. Niggle and her friend are standing next to the fence discussing women's rights. In the second image, "An attentive listener," Mr. Niggle is eavesdropping on his wife and her friend from the other side of the fence. In the third image, "Companions in mischief," a boy has fetched some hammers and nails and joins Niggle. The fourth image, "They hatch a plot," depicts the father and son nailing the women's skirts to the fence. In the fifth image, "They nail the ladies," the men are fleeing the scene, and in the final image, "The Ladies in disarray," the women, having discovered their predicament, are screaming for help.

Figure 1.8. Bamforth's lantern series, *Women's Rights* (1887)

At first glance, Bamforth's 1899 motion-picture version of *Women's Rights* appears to be a direct transposition of the lantern gag: it maintains the six phases of comic action, and its three-shot structure corresponds to the three sections of the lantern series, which alternate between the women's and men's sides of the fence. As the catalogue from the 1978 FIAF Congress in Brighton (where it was known as *Ladies' Skirts Nailed to Fence* and misdated 1900) describes:

> Two old ladies wearing bonnets and shawls stand gossiping behind a fence. Two workmen creep up on the other side of the fence, pull the hems of the ladies' skirts through the palings and nail them to the wood. When the women discover their plight they try and get away and pull the fence down in their attempt.[99]

However, a closer look at the motion picture reveals its first departure from the lantern source: it only shows one side of the fence. That is, it employs a single camera setup, and simulates a cut to a reverse angle by moving the women behind the fence in the second shot.

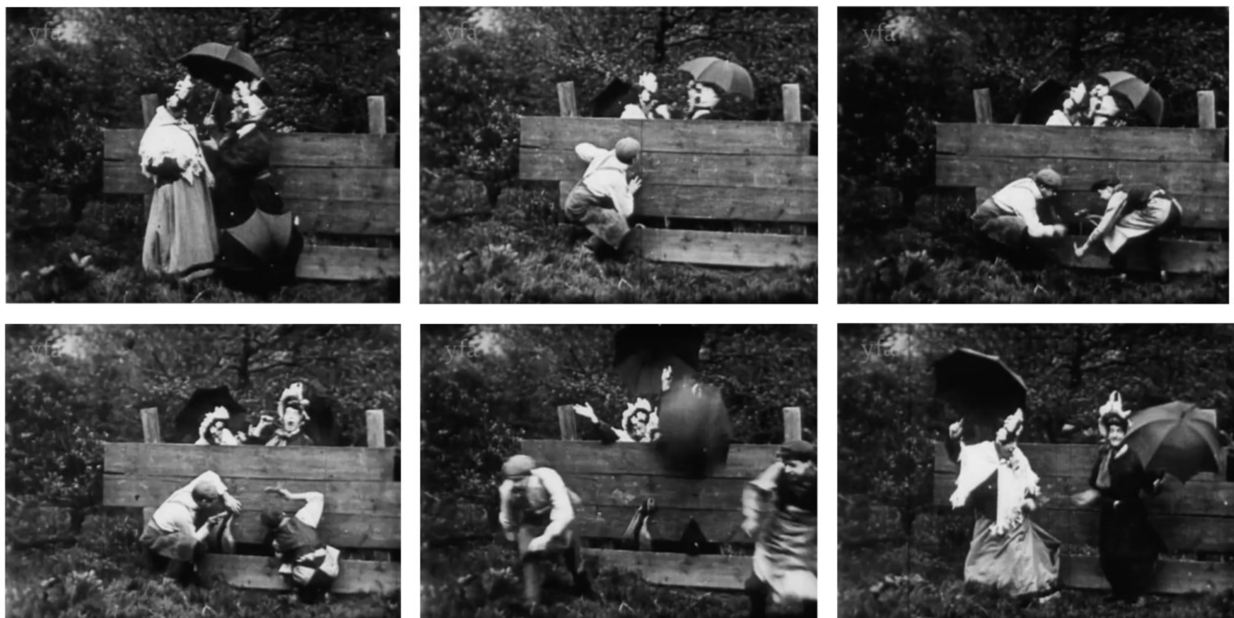

Figure 1.9. Bamforth's film, *Women's Rights* (1899)

[99] *Cinema 1900-1906: An Analytical Study, Volume 2: Filmographie/Filmography*, ed. André Gaudreault (Bruxelles: FIAF, 1982, 26.

In the decades following FIAF Brighton (and without the benefit of the lantern source), this cut to the second shot generated a fair amount of discussion. Barry Salt, for instance, in his well-known study on the development of technical filmmaking, hailed it as "The earliest cut to another direction within a scene … in which the second shot is taken at 180 degrees to the first from the other side of the fence with time continuity." He noted that it was accomplished by "an ingenious cheat which depends on moving actors to the other side of the same symmetrical fence, without moving the camera for the second shot."[100] In an article on narrative perspective in early cinema, Ben Brewster identified the film's "shifting the camera through 180°" as an instance "in which changes of viewpoint not necessarily involving true POV make possible hierarchies of relative knowledge for characters and spectators."[101] And Nöel Burch, in an examination of pre-classical instances of "camera ubiquity"—varying shot scales, camera angles, axial matches—claimed that it proves that "ubiquity could at this date be expressed on … the terrain of the fixed viewpoint."[102] At the same time, the cut has been described as a demonstration of "(unconscious) pedagogic irony," a "mis-placed confidence in the Kuleshov effect" (avant la lettre), and even "plain laziness on the part of the filmmakers."[103] As with 180-degree matches in later films, both sides of the fence are shown consecutively. But they are also presented "in the same pro-filmic space, a typically theatrical, or lantern-slide device."[104] Thus

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[100] Barry Salt, *Film Style and Technology: History and Technology*, 2nd ed. (London: Starwood, 1992), 56.

[101] Ben Brewster, "A Scene at the 'Movies'," *Screen* 23, no. 2 (July-August 1982): 7.

[102] Burch, *Life to those Shadows*, 225.

[103] Burch, *Life to Those Shadows*, 225; Brewster, "A Scene at the Movies," 7; Michael Brooke, "Women's Rights (1899)," http://www.screenonline.org.uk/film/id/444603/index.html

[104] Burch, *Life to Those Shadows*, 225.

the simulated reverse angle in *Women's Rights* has been deemed at once precocious, naïve, and careless.

But the original lantern version of *Women's Rights* complicates this reading. Where the motion picture presents one side of the fence as two sides, the lantern source shows two distinct sides; where the motion picture cheats a reverse angle, the lantern source achieves a true one; where the motion picture maintains the women's left/right relationship to the camera on either "side" of the fence, the lantern source maintains the left/right relationship of the women to each other. In other words, the motion picture violates what would come to be known as the 180-degree rule, but the lantern source obeys it.

What are we to make of this departure? It is clearly a deliberate choice on the part of the Bamforths, but on what basis? To my mind, the cheated reverse angle reflects the need to present a clear and continuous comic action and a sophisticated understanding of the different ways in which gag films and lantern gags do so on the screen. As I have shown, both the lantern and motion picture forms represent gags as continuous actions. In motion pictures, of course, temporal continuity is ensured by the concantenation of film frames. In lantern series, however, it is achieved in a concantenation of a series of registering images plus the transitions between them; the main actions are represented in the images, and the minor movements of the characters in the transitions. Accordingly, as I will illustrate, lantern transitions perform representational as well as linking functions.

Consider entrances and exits. While single-shot gag films typically show character entrances, lantern gags represent them in fade-ins, fade-outs, and dissolves rather than in the images themselves. So, *L'Arroseur arrosé* begins with the gardener watering the garden, then shows the mischievous boy entering frame right. *The Mischievous Boy*, by contrast, represents

the boy's entrance in the fade-in to the first image, which shows the boy spying on the gardener. If these approaches were reversed—if *L'Arroseur arrosé* were to begin with the boy already standing near the gardener and *The Mischievous Boy* with the boy entering the scene—the narrative flow would be disrupted in projection. The relatively static image of the boy and man standing in the garden would convey an indeterminate amount of time in the gag film, while leaving out an important part of the miniature narrative—the boy's sneaking up on the gardener. The partial body of the boy, intersected by the right edge of the frame, would represent a fraction of a second of the lantern gag's story and plot time; if projected for ten or twenty seconds, it would arrest the action in the manner of a freeze frame. In lantern gags and gag films, the strategies for representing entrances and exits, and for achieving temporal continuity more generally, are often inverted.

Transposing the lantern series of *Women's Rights* into a continuous motion-picture gag posed two major challenges. First, the motion picture had to present two changes in viewpoint—from the women's side of the fence to the men's, and from the men's side to the women's. Secondly, it had to show the entrances and exits of Mr. Niggle and the boy. In the lantern version of *Women's Rights*, these shifts in perspective, character movements, and concurrent events were all represented in the transitions between images. However, if the motion picture replicated the lantern series, temporal continuity would be interrupted several times. Cutting to true reverse angle shot—showing the other side of the fence and the women's positions flipped—would produce the effect of a jump (though not a true jump cut), which would, in turn, denote a jump in time. Beginning on a frame of Niggle crouching by the fence would create an ellipsis (how did he get there?). Omitting the men's exit would confuse linear time (are they still there?), and cutting back to the first setup would create another temporal jump. By showing Niggle's

entrance after the cut to the second shot and his exit before the cut to the third, the film avoids undesired ellipses. And by employing a single camera setup and maintaining the women's positions to the camera across cuts, it averts jumps in time. Although the women may appear to jump over the fence, the Bamforths' intentional departure from the true 180-degree configuration of the lantern series ensures both temporal continuity and simultaneity of action. Ingenious cheat indeed.

But there are other departures. *Women's Rights* makes a number of small yet significant adjustments to the original lantern series. For instance, instead of recreating the long fence that extends past the left and right edges of the image, it uses a freestanding portion of a fence, which takes up three-quarters of the frame. Rather than centering on the fence, it frames it off-center, aligned with the right edge of the image. In lieu of photographing the fence straight on, it shoots it at a slight angle. These changes create a considerably more dynamic composition than that of the lantern source, which confines the action to a single plane. Much like the Lumières' second version of *L'Arroseur arrosé* (1896), which breaks from the frontal-horizontal approach of the 1895 version (and *The Mischievous Boy*), *Women's Rights* stages the comic action in-depth, along diagonal lines. While the playing area is still rather shallow given the fact that it is delimited by the fence, this asymmetrical-diagonal approach allows *Women's Rights* to suggest an expanded sense of space beyond the frame, from which the husband and the boy enter and to which they retreat.

This new approach also enhances the sense of conflict in the gag. It creates greater contrast between the unrestricted movements of the husband and boy and the stationary position of the "women," now played by men (another departure, likely influenced by music hall acts), who are literally and figuratively anchored to the fence. But this choice of casting men in the

roles of the women also dampens the sexist tone of the original series. The men's style of performance is extremely broad and physical, so much so that at the end of the motion picture, the "ladies" break free from the fence, pulling a plank with them as they glance at the camera. This final action, a counteraction to the three main phases of development that form the gag's anatomy—women discussing, men nailing, women trapped—has the effect of turning the misogynist prank on its head: unlike the original series, in which the women are forced to endure the men's punishment, they have emancipated themselves. Thus, in my (admittedly optimistic) reading, the anti-feminist gag concludes with a kind of pro-women's liberation statement as the single-shot gag film breaks away from the style of lantern gags and enters the domain of lantern-film production.

If the motion picture half of the production departs from the lantern version of *Women's Rights*, the Life Model half, *Gossips and Eavesdroppers*, constitutes an even more radical departure. It completely abandons the classical style of lantern gags, embraces the representational strategy of its motion-picture companion, and develops its own way of experimenting with space. For while *Gossips and Eavesdroppers* depicts the same comic story as the original lantern series and represents the same six phases of action, it photographs each phase from one side of the fence, effectively employing the same cheated reverse angle as the second shot of the motion picture. And while it is based on the same pro-filmic event, features the same actors in the same costumes at the same fence, and adopts the same overall asymmetrical-diagonal composition as its motion picture companion, it devotes a different camera position for each image.

The breakdown of the scene is as follows: 1.) "As if we down-trod women hadn't any common rights," a tight (by lantern standards) two-shot centered on the women, who are

standing at the camera-left edge of the fence; 2.) “Stood Mr. Niggle, listening to all they had to say,” a longer shot with a higher angle, showing Niggle eavesdropping on the “other side” of the fence and the two women behind it, taken a few steps to the right of the previous image; 3.) “We’ll get their tails in quietly, and nail them to the boards,” a longer shot with a higher camera angle than the second image, which shows the boy meeting Niggle at the fence; 4.) “They fished for, and the tails they hooked without the slightest noise,” a shot with the same length and a lower camera angle, which shows Niggle and the boy nailing the skirts; 5.) “While Niggles, with his worthy boy, in flight now safety seeks,” the longest shot, shows the fence in the background and Niggle and his boy in the foreground, running away from the women and toward the viewer, taken a few feet back from the previous image, and with a higher camera angle; 6.) “And now behold the champions of women’s every right,” a similar but tighter version of the first two-shot of the women flailing their arms and parasols, one of which intersects the right edge of the frame.

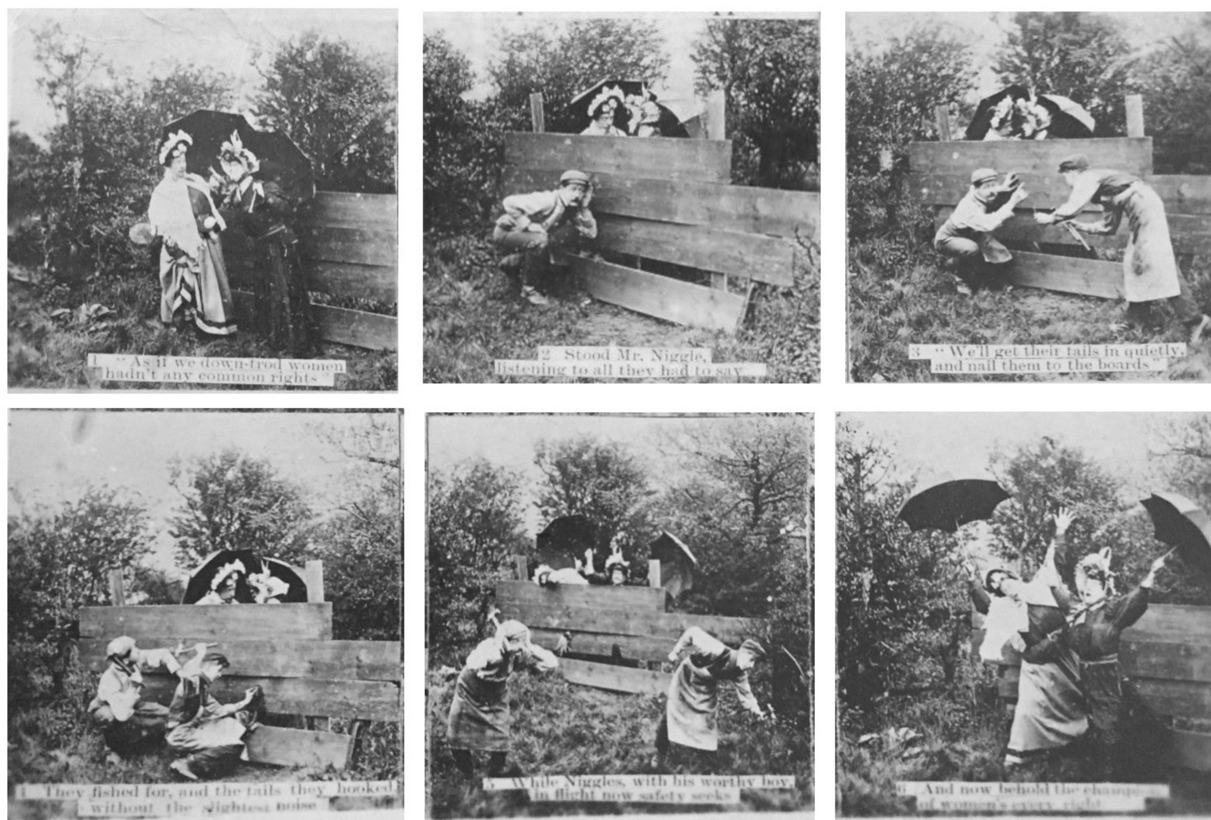

Figure 1.10. Bamforth's lantern series, *Gossips and Eavesdroppers* (1899), from postcard, c. early 1900s.

Gossips and Eavesdroppers thus represents the gag across a series of differing viewpoints, and in doing so, presents an unprecedented and innovative approach to lantern series production. Never before this has a lantern series been photographed in tandem with a motion picture, at a single exterior location, and especially, with varying shot lengths and camera angles. How did this new development arise? Why wouldn't the Bamforths simply photograph *Gossips and Eavesdroppers* from a single camera position, essentially replicating *Womens' Rights* in six stills, as one might expect? The explanation for this departure is found in the motion picture. While *Women's Rights* is able to suggest the space surrounding the frame with its slightly angled shot and the Niggle men's entrances and exits, the lantern series can't show these frame crossings. That is, if the series employed a single viewpoint, it would not be able to experiment

with space alongside its lantern-film companion; it would be confined to the old style of lantern gags. Accordingly, *Gossips and Eavesdroppers* forgoes continuity of frame and background—the formal cornerstones of lantern gags, which ensure the joining of character movements across images—in order to explore the world of the gag. It tailors each shot to the action it is showing. It depicts the gag across a series of longer and closer shots, with higher and lower angles. And in projection, as the images register and dissolve, it realizes a quasi-continuous comic event across multiple perspectives and the transitions between them.

This development may seem slight, but its implications are profound. In terms of screen practice, *Gossips and Eavesdroppers* presents a new kind of scene construction based on what we might call *lantern decoupage*: an intra-gag breakdown at the time of shooting, which fragments the unified space and transforms it into synthetic space on the screen. It also introduces a new kind of *lantern ubiquity* based on changing viewpoints, and a new kind of *lantern movement* based on a dynamic frame. From a media historical perspective, *Gossips and Eavesdroppers/Women's Rights* revises understandings of the lantern-film relation c. 1900 by demonstrating a synchronic symbiosis between the two forms. It also shows that the lantern was as innovative as motion pictures in the years following their emergence, particularly in terms of spatio-temporal developments.[105]

Thus, in the reciprocal example of lantern films, the old lantern influences the new motion picture, the new motion picture influences the old lantern, and the old lantern does

[105] Indeed, cuts to shots within scenes don't begin appearing in fiction films until 1903, and when they do, they are typically cuts in and out at the same camera angle, as in the famous shot of the woman's ankle in *The Gay Shoe Clerk* (Porter, 1903). See Barry Salt, *Film Style and Technology*, 51. cf. Burch, *Life to Those Shadows*, 87–91. Burch argues that insert close-ups in early British film are an "extrapolation" of life model lantern practices.

something new. From a theoretical standpoint, then, lantern-film production challenges accounts of media change that tend to typecast older media as objects of imitation, integration, and absorption rather than appreciating them as agents of influence, development, and transformation.[106] Like the gags they co-represent, lantern-film productions defamiliarize such automatisms, and in awakening us to their absurdity, offer a possible route by which, according to Havel, we can achieve a catharsis: a purging of even the most subtle teleological assumptions.[107]

Bobby's Flirtation

West Yorkshire, England, summer 1899. The young men and women in the Bamforth crew have returned to the park. Last summer, they filmed one of their first motion pictures at this location—their single-shot bench gag, *Weary Willie in the Park/An Overfull Seat*. This summer, they are stepping up production, creating a number of comical motion picture subjects for Riley, and five new humorous Life Model series for their own catalogue. Some of these productions are unrelated, while others, such as the two-slide set, *The Tramp and the Milk* and the motion picture, *Catching the Milk Thief* (aka *Chokee Bill and the Milk*), overlap a bit. Still others are joint productions that represent the same comic events in Life Model slide series and films. Here in the park, the Bamforths photograph three comedies: the motion picture, *The Biter Bit*, a remake of their lantern series, *The Mischievous Boy* (and *L'Arroseur arrosé*); the Life Model series, *Wet Paint*; and, the lantern-film production, *Bobby's Flirtation/The Tramp and the Baby Bottle*. For all three, they place their cameras, actors, and props near the same intersecting paths

[106] Thorburn and Jenkins, introduction to *Rethinking Media Change*, 12.

[107] Havel, "Anatomy of a Gag," 24.

and move them as desired for each setup. They also experiment with a new stylistic approach, which allows them to create a sense of depth and breadth within and without the images to open up the gags to their worlds.

For *The Tramp and the Baby's Bottle*, they frame the action on a diagonal and stage it in three distinct planes with multiple character entrances and exits at both sides of the frame. The film begins on an empty bench, placed in the left half of the frame and angled away from the camera. The nursemaid enters frame right, parks the pram next to the right end of the bench, sits down, and begins reading her magazine. The policeman enters the foreground frame left, walks past and around the nurse, kissing her from the backside of the bench before taking a seat beside her. The nurse and the policeman cuddle for a moment, then get up and walk off, exiting frame right. The tramp enters frame left, dashes to the pram, grabs the baby's bottle and begins to drink from it. Meanwhile, the nurse and the Bobby, now in the background, spot the tramp, and hurry back to the bench, re-exiting and re-entering frame right. As the nurse returns to the baby, the policeman wrestles with the tramp in the foreground and leads him away frame right. At the very end of the film, they harness some spontaneity as a dog, which has entered the frame during the tussle, jumps onto the bench; the nurse pats it, and smiles at the camera.

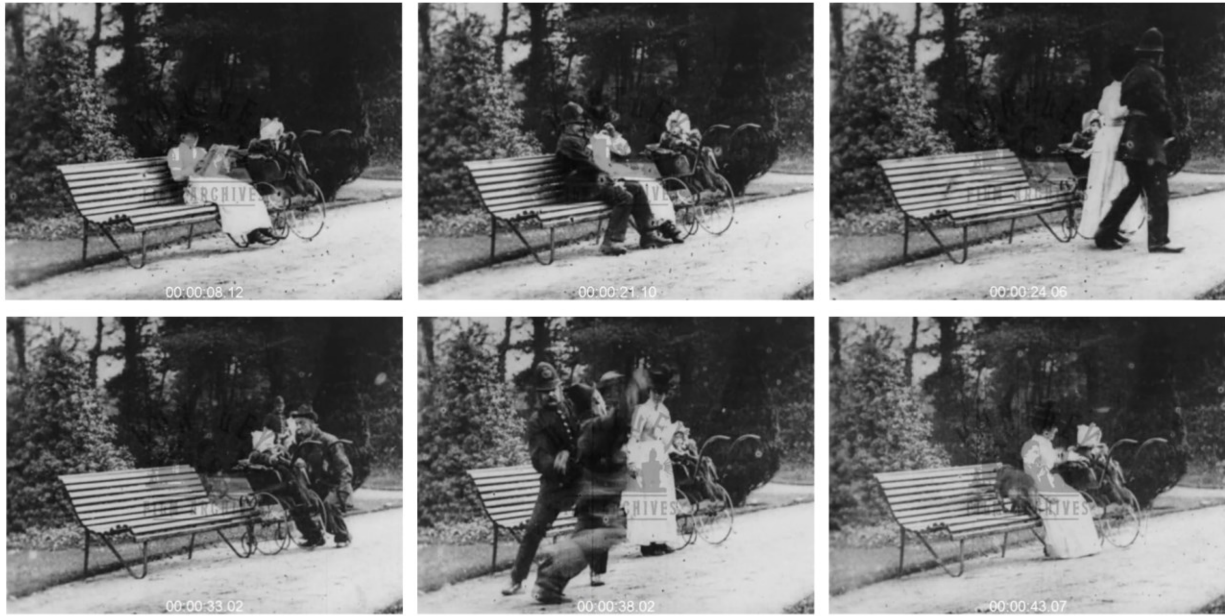

Figure 1.11. Bamforth's film, *The Tramp and Baby's Bottle* (1899)

For *Bobby's Flirtation*, they construct the scene from multiple viewpoints, employing a different camera setup for each image. They begin the series with a slightly high angle shot centered on the nurse and the baby. For the second image, which shows Bobby seated on the bench next to the nursemaid, they move the camera a few feet to the left. For the third image, in which Bobby and the nursemaid stroll away from the baby, they walk the camera back, turn it 45 degrees to the right, and cheat the edge of the bench and the baby/pram into the right corner of the frame. For the fourth image, showing the tramp stealing the baby's bottle, they turn the camera slightly to the left and walk it a few feet toward the pram. For the fifth image, a longer and wider shot of Bobby and the tramp tussling on the left and the nurse and baby on the right, they move the bench back to the edge of the grass, and turn the camera 45 degrees to the left.

Figure 1.12. Slides 1-6 from Bamforth's lantern series, *Bobby's Flirtation* (1899)

In lieu of concluding with the nursemaid seated on the bench beside the baby and pram as they do for the motion picture half of the production, the Bamforths come up with a new device: an emblematic shot of Bobby, presented in a distinctly different space/time than that of the scene at the park bench. For this final image, they photograph Bobby standing in front of a brick wall, proudly displaying his new sergeant's stripe, presumably awarded for his derring-do. Ending on the portrait of Bobby has the same effect as will the emblematic shots that will begin appearing in motion pictures around 1903. It provides a kind of narrative closure, albeit tinged with irony; it was Bobby, after all, who led the nursemaid away from her charge, creating an opportunity for the tramp's transgression. The final image of Bobby, then, turns the gag into a little story that while increasing the narrativity of the series, perhaps weakens its comic punch.

Figure 1.13. Slide 7 from Bamforth's lantern series, *Bobby's Flirtation* (1899)

During the next year, the Bamforths will make several motion pictures—mostly comic regional subjects, depicting real-life mischievous boys at play—and a half dozen humorous Life Model series. And in 1901, they will photograph *The Boy and the Policeman*, a Life Model chase across three settings and eleven slides, and "pick-up" two Life Model companions for their motion picture comedies, effectively completing two final lantern films: *The Amateur Conjurer*, which corresponds with *The Would-Be Conjurer* (1900), and *The Tramp and the Nurse*, which corresponds with *The Nursemaid's Surprise* (1898). Following the 1901–1902 Lantern Season, the Bamforth firm will jettison humorous Life Model series and motion pictures and will focus on song slides series production and postcard publishing after the British Post Office allows

divided back postcards in 1902. Among the first negatives they will repurpose for the front sides of their new "Life Model Series" picture postcards are those from *Bobby's Flirtation* and *Gossips and Eavesdroppers*.

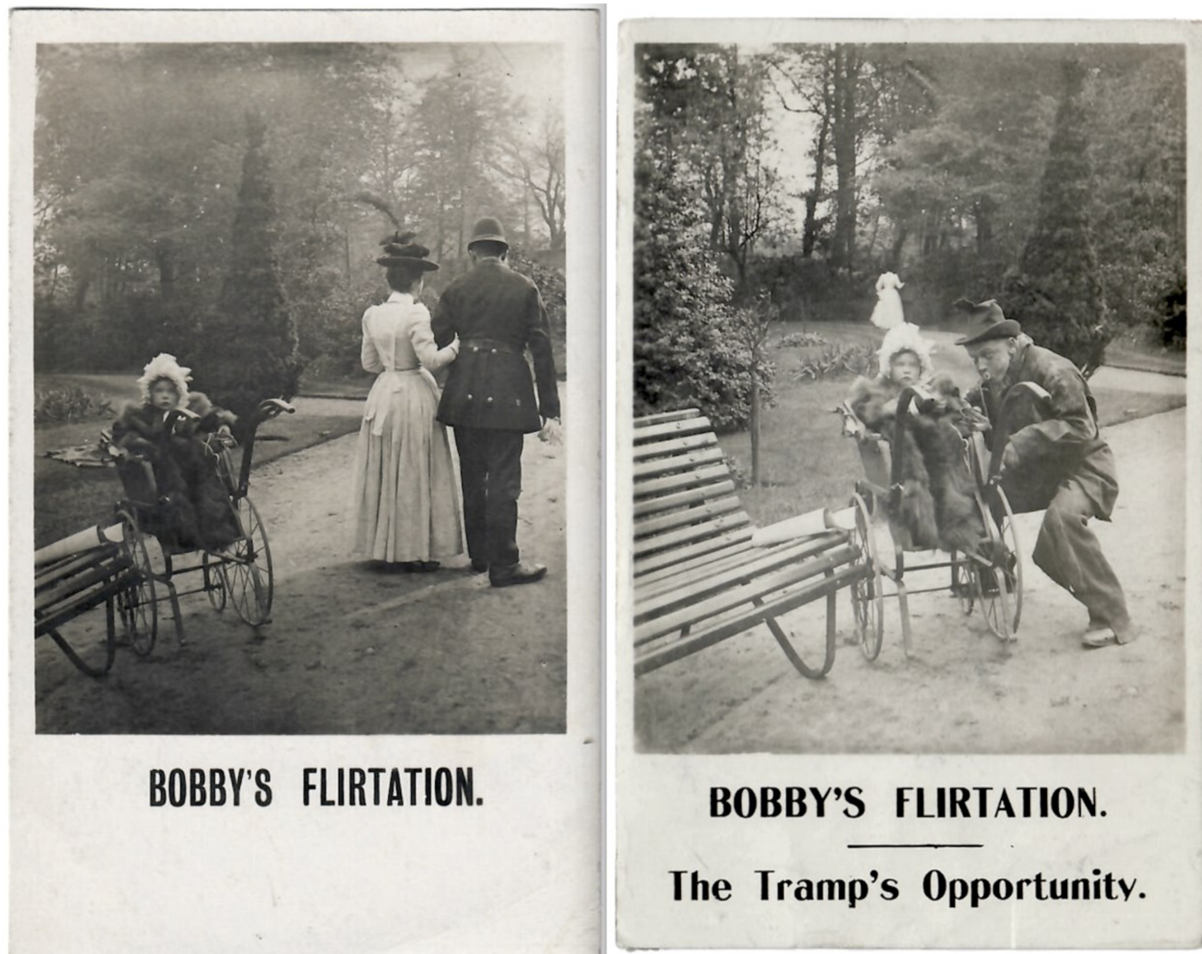

Figure 1.14. Bamforth postcards "Bobby's Flirtation" and "Bobby's Flirtation. The Tramp's Opportunity," c. early 1900s.

The comedies will continue to circulate for a few more years, the motion pictures will be offered in the 1903 Hepwix Catalogue, and the Life Models will remain in Riley's stock until 1914. However, 1899 will be the first and last year of true lantern-film production—that is, the last year they will photograph motion pictures and Life Model series of the same profilmic events on the same day and around the same benches and fences. Yet while these bold

experiments will come to an end, Bamforth's innovation will leave us with a legacy: the legacy of a new paradigm for the exploration of old-new media relations based on reciprocal influence and mutual transformation. Lantern-film production demands to be recognized.

Chapter 2

Pictures at an Exhibition: Lantern Tableaux and Lantern Specificity

> *For some time, all useful ideas in art have been extremely sophisticated. Like the idea that everything is what it is, and not another thing. A painting is a painting. Sculpture is sculpture. A poem is a poem, not prose. Etcetera. And the complementary idea: a painting can be "literary" or sculptural, a poem can be prose, theatre can emulate and incorporate cinema, cinema can be theatrical. We need a new idea. It will probably be a very simple one. Will we be able to recognize it?*
>
> -Susan Sontag[1]

> *And there is an autonomous "art" (a "text"), that of the* pictogram *("anecdotalized" images, obtuse meanings placed in a diegetic space); this art taking across historically and culturally heteroclite productions: ethnographic pictograms, stained glass windows, Carpaccio's* Legend of Saint Ursula, images d'Epinal, *photo-novels, comic strips*.
>
> -Roland Barthes[2]

What Enoch Saw

Let me begin with two very different treatments of "Enoch Arden's Return," the dramatic climax of Alfred Tennyson's narrative poem, *Enoch Arden* (1864). The poem itself recounts the story of the eponymous hero, a happily married fisherman who suffers financial distress and becomes a merchant sailor to support his family. He is shipwrecked on a desert island, and after many years, he returns to his seaside village to learn that his wife, Annie Lee, believed him dead and married their childhood friend and his romantic rival, Philip Ray, and has a child by him. Yearning to see her face again, Enoch goes to Philip's house and spies a picture of domestic bliss—the contented

[1] Susan Sontag, "Film and Theatre," *The Tulane Drama Review* 11, no. 1 (Autumn, 1966): 37.

[2] Roland Barthes, "The Third Meaning," in *Image Music Text*, trans. Stephen Heath (New York, Hill and Wang, 1977), 66.

family gathered beside the hearth. Not wishing to ruin Annie's happiness, he makes the agonizing but noble decision never to let her know that he is alive, and dies of a broken heart.

In the poem, Enoch's fateful homecoming is described in this vivid passage:

For Philip's dwelling fronted on the street,
The latest house to landward; but behind,
With one small gate that open'd on the waste,
Flourish'd a little garden square and wall'd:
And in it throve an ancient evergreen,
A yewtree, and all round it ran a walk
Of shingle, and a walk divided it:
But Enoch shunn'd the middle walk and stole
Up by the wall, behind the yew; and thence
That which he better might have shunn'd, if griefs
Like his have worse or better, Enoch saw.

For cups and silver on the burnish'd board
Sparkled and shone; so genial was the hearth:
And on the right hand of the hearth he saw
Philip, the slighted suitor of old times,
Stout, rosy, with his babe across his knees;
And o'er her second father stoopt a girl,
A later but a loftier Annie Lee,
Fair-hair'd and tall, and from her lifted hand
Dangled a length of ribbon and a ring
To tempt the babe, who rear'd his creasy arms.
Caught at and ever miss'd it, and they laugh'd;
And on the left hand of the hearth he saw
The mother glancing often toward her babe,
But turning now and then to speak with him,
Her son, who stood beside her tall and strong,
And saying that which please him, for he smiled.

Now when the dead man come to life beheld
His wife his wife no more, and saw the babe
Hers, yet not his, upon the father's knee,
And all the warmth, the peace, the happiness,
And his own children tall and beautiful,
And him, that other, reigning in his place,
Lord of his rights and of his children's love,--
Then he, tho' Miriam Lane had told him all,
Because things seen are mightier than things heard,
Stagger'd and shook, holding the branch, and fear'd

> To send abroad a shrill and terrible cry,
> Which in one moment, like the blast of doom,
> Would shatter all the happiness of the hearth.
>
> He therefore turning softly like a thief,
> Lest the harsh shingle should grate underfoot,
> And feeling all along the garden-wall,
> Lest he should swoon and tumble and be found,
> Crept to the gate, and open'd it and closed,
> As lightly as a sick man's chamber door,
> Behind him, and came out upon the waste.[3]

The first treatment, a sequence from D. W. Griffith's motion picture, *Enoch Arden* (Biograph, 1911), is both a comprehensive adaptation of Tennyson's set piece and a transformation of it into filmic narrative.[4] The sequence begins with a three-quarter shot of Enoch stealing up to Philip's house, cuts to a medium shot of the happy scene spied by Enoch—Annie speaking with the son on the left, the daughter dangling the ribbon with the ring over the baby on Philip's lap on the right—and then to an intertitle, "Enoch's crowning sorrow—all that was his another's." The next ten shots, which alternate between Enoch crouching outside the window and the family gathering inside Philip's house, establish a relationship between the two spaces and the characters within them while interweaving two very different styles of performance: the lively, naturalistic movements of the family, and the slow, stylized gestures of Enoch, now in a medium close shot as he signifies (in conformity with the Delsarte System of Expression) astonishment (eccentric eye and eyebrow), conflict (concentro-concentric hand), and

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[3] Alfred Tennyson, *Enoch Arden*, *Etc.,* (London: Edward Moxon & Co., 1864), 40–42.

[4] Tom Gunning, *D. W. Griffith and the Origins of American Narrative Film: The Early Years at Biograph* (Urbana: University of Illinois Press, 1994), 113. Griffith's transformation of the stage tradition of melodramatic gesture into filmic discourse is a hallmark of what Gunning terms "the narrator system."

supplication (head thrown back, gazing upwards).[5] Following another three-quarter shot of Enoch, who stands and repeats the gesture of supplication, and an intertitle stating Enoch's entreaty to God to give him strength "not to tell her, never to let her know," the sequence concludes with a final three-quarter shot of Enoch, staggering away from the house.

Figure 2.1. Two frames from Griffith's *Enoch Arden* (1911)

The second treatment, by contrast, a Life Model lantern slide from York & Son's series, *Enoch Arden* (1890), presents a *certain aspect* of Tennyson's passage. Entitled "That Which He Better Might Have Shunn'd He Saw" (herein TWHBMHSHS) and photographed in a studio set with a posed model, painted scenery, and a little faux terrain (some sandy gravel and shrubbery in the foreground), the image depicts a section of the street, a portion of Philip's dwelling fronted on it, part of the garden wall, and the trunk of the ancient yew tree. Just left of center, stooping between the wall and the house, is a bearded man (presumably Enoch), wearing a broad-

[5] See Genevieve Stebbins, *The Delsarte System of Expression* (New York: E. S. Werner, 1885); cf. Roberta Pearson *Eloquent Gestures: The Transformation of Performance Style in the Griffith Biograph Films* (Berkeley: University of California Press, 1992), especially Chapter 3 on histrionic and verisimilar styles of acting. Pearson describes Enoch's performance in this scene as "verisimilarly coded."

brimmed hat and a horizontally striped pullover. Shown in an upper torso, back three-quarter view and in a *profil perdu* pose that obscures his face, he peers into a blank window.

Figure 2.2. Slide # 18 from York & Son's *Enoch Arden* (1890)

If the Griffith/Biograph version of "Enoch Arden's Return" is a study in symmetry and clarity, York's treatment is its inverse: a model of asymmetry and ambiguity. Indeed, TWHBMHSHS is a curiously spare treatment of the scene, and one wonders why it withholds so much information. York & Son could have easily fleshed it out in a number of ways, all of which would have been standard practice in late nineteenth-century Life Model slide series production. For instance, they could have created a second image, showing the family inside Philip's house. Or they could have cut out a window in the scenery flat and posed models acting as Annie, Philip, and the children behind it. At the bare minimum, they could have inserted a painted

silhouette of the family in the window. Instead, they produced an image that is partial and open to interpretation; if we didn't know TWHBMHSHS was a representation of Enoch Arden's Return, we might mistake it for that of a Peeping Tom stealthily peering into a ground floor bedroom window, or a Victorian British escaped convict poised to commit a burglary.

What kind of image is TWHBMHSHS? Is it an illustration of the specific moment when Enoch stoops outside Philip's house and looks into the window? Or is it a *Life Model tableau*—a Life Model lantern image from a dramatic lantern performance—that represents Enoch's creeping up to and staggering away from the window, the room on the other side of it, and *what Enoch saw there*: the hearth; "Philip, the slighted suitor of old times"; "a later but a loftier Annie Lee"; "the babe, who rear'd his creasy arms"; "the mother glancing often toward her babe"; "her son, who stood beside her tall and strong"; and "all the warmth, the peace, the happiness" that surrounds them? As we shall soon see, it is the latter.

It is the primary thesis of this chapter that lantern tableaux, sometimes historically (and somewhat misleadingly) called "magic lantern illustrations," are not mere supplements, elucidations, or embellishments of passages from dramatic narratives, as conventional wisdom would suggest, but embodiments or realizations of them. Just as Tom Gunning describes early cinema tableaux as micro-narratives that function as semi-independent scenes, lantern tableaux are the constituting units of the story; pictorial narration is integral and constitutive of their design.[6] Similar to what Nöel Burch calls early cinema's "passion" mode (after the many Passion Plays films), which presents a series of discrete tableau that are "*linked together in a sequence*

[6] Tom Gunning, "Non-Continuity, Continuity, Discontinuity: A Theory of Genres in Early Film," *Iris* 2, no. 1 (1984): 107.

which everyone could be assumed to know,"[7] they "establish the principle of narrative linearity," a narrative progression on the iconographic level, further linearized by a verbal component, such as a lecture, recitation, or song.[8] Life Model tableaux like TWHBMHSHS are likewise designed to realize the whole of powerfully emotional scenes like Enoch's Return and to constitute the entirety of dramatic narratives like *Enoch Arden*.

But as the second anomaly in our constellation, TWHBMHSHS is typical in at least several ways. First, its form, the Life Model lantern slide, is the basis of the most popular lantern entertainments of c. 1900: sentimental stories, ballads, and recitations centered on "deprivation, childhood, death, and redemption."[9] Secondly, its style, the tableau, is central to the "pictorial dramaturgy" that dominated nineteenth-century theatre.[10] Finally, its theme of a sailor returning home, having been lost at sea for many years, to discover his wife happily remarried, is among the best known in nineteenth-century literature.[11] *Enoch Arden* is ubiquitous in the late nineteenth and early twentieth century; it appears in every form of popular visual culture, from print, to tableaux vivants, to theatre, painting, photography, the lantern, and motion pictures.[12]

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[7] Nöel Burch, *Life to Those Shadows*, trans. Ben Brewster (London: BFI, 1990), 145.

[8] Burch, *Life*, 146.

[9] Joe Kember and Richard Crangle, "Folk Like Us: Emotional Movement from the Screen and the Platform in British Life Model Lantern Slide Sets 1880–1910." Fonseca, *Journal of Communication* 16, (2018): 119.

[10] Martin Meisel, *Realizations: Narrative, Pictorial, and Theatrical Arts in Nineteenth-Century England* (Princeton: Princeton University Press, 1983), 45.

[11] P. G. Scott, *Tennyson's "Enoch Arden": A Victorian Best-Seller* (Lincoln, England: Tennyson Research Center, 1970), 5.

[12] See, for instance, Currier & Ives, "Enoch Arden – The Hour of Trial," lithograph (1869); Arthur Mathieson's play (1869), and "Enoch Arden's Return," in William F. Gill, *Parlor Tableaux and Amateur Theatricals* (Boston: J. E. Tilton and Company, 1871), 131–35).

But what makes TWHBMHSHS unusual—what sets it apart from all other treatments of the scene—is the fact that it is the only version that does not portray the interior of Philip's house. Why don't we see what Enoch saw?

My interest lies in exploring this incongruous treatment of the scene and what its particularities might have to tell us about the lantern's engagement with other fin-de-siècle media and art forms. A corollary to the above thesis, then, is that the lantern inevitably bears the traces of its interactions with neighboring forms as well as those of its own cumulative repertoire. By the same token, as an inherently cross-medial and cross-historical phenomenon, the tableau can provide the means by which to explore what we might call *lantern specificity*. Unlike the essentialist-purist accounts that extend from Lessing to Greenberg and beyond, lantern specificity holds that the lantern's nature is essentially mixed and impure, and historically and case specific.[13] In other words, it understands that while many lantern practices are distinctive, they aren't determined by the lantern's material or physical qualities, but develop and come into focus in relation to the neighboring media and art forms with which the lantern interacts.

Accordingly, an inquiry into lantern specificity involves adopting an interdisciplinary approach in which fictional lantern performances are considered alongside their counterparts in literature, theatre, and cinema. It also entails looking closely at the lantern's interchanges with other popular entertainments, actively attending to the new hybridized forms that emerge in the process. The idea of lantern specificity is thus potentially useful not only in critical discussions surrounding the lantern as a form of screen entertainment, or in ongoing debates between stage

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[13] Gotthold Ephraim Lessing, *Laocoön: An Essay upon the Limits of Poetry and Painting*, trans. Ellen Frothingham (Boston: Roberts Bros., 1766/1873); Clement Greenberg, "Towards a New Laocoon," *Partisan Review* 7 (July-August 1940): 296–310.

and screen, but also in the project of historicizing new media. Here, the lantern's interaction with other forms and the resultant hybridization can serve as "relevant precedent" for the processes that characterize contemporary media in transition.[14] Indeed, they might even counteract pessimistic predictions of future media erasure with the hope of new creative possibilities.[15]

This chapter continues my exploration of the c. 1900 lantern's dynamic patterns of superposition and reciprocity by way of the Life Model tableau. I begin this exploration by tracing the stylistic and narrative strategies of the lantern tableau vis-à-vis the tableau across media. As I show, the *classical lantern tableau* is inextricably linked with nineteenth-century pictorial dramaturgy, and its style is based on the lantern's transposition and transformation of the dramatic tableau. Following this, I examine the lantern series, *Uncle Tom's' Cabin,* in order to elaborate the *classical tableau style of lantern narrative*. Returning to *Enoch Arden*, I argue that the Life Model tableau's departure from the classical style reflects its reciprocity with the late nineteenth-century stage and the naturalist and realist aesthetics that began to influence it in the 1880s. In light of this examination, I offer a new way of evaluating lantern specificity on a case-by-case basis. What emerges is a hybrid portrait of the lantern as a translator of other media and a medium in its own right, comparatively framed by the tableau.

Tableaux!

In order to fully appreciate the lantern tableau and the tableau style of lantern narrative, we must first recognize its relationship to the tableau itself. But, of course, there are tableaux and tableaux

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[14] William Uricchio, "Historicizing Media in Transition," 35. See also Lisa Gitelman *Always Already New: Media, History, and the Data of Culture* (Cambridge, MA: MIT Press, 2008), ix.

[15] Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (*Palo Alto, CA*: Stanford University Press, 1999), 1.

and tableaux…. There are the interrelated nineteenth-century tableaux paintings, literary tableaux, and stage tableaux examined in Martin Meisel's seminal book, *Realizations;*[16] the postwar cinematic tableaux discussed by Brigitte Peucker;[17] the "tableau-style" of early cinema formulated by Tom Gunning and elaborated by Valentine Robert;[18] and the early twentieth-century tableaux and statues vivants described by Vito Adriaensens and Steven Jacobs, to name a few.[19] The tableau is an intermedial and interdisciplinary form *par excellence*, but what is it?

According to the *Oxford English Dictionary*, the tableau is "a picture; a picturesque or graphic description." More precisely, it is a particular kind of *representation*. Referring to the eighteenth-century philosopher Denis Diderot's famous equation of the dramatic scene and the painted tableau, Roland Barthes claims the tableau is founded on the frame and the unity of action within it. Whether pictorial, theatrical, or literary, it is "a pure cut-out segment with clearly defined edges, irreversible and incorruptible," which "promotes to the status of essence … everything it brings into its field"; as such, it is the "very *condition* that allows us to conceive … all those arts."[20]

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[16] Martin Meisel, *Realizations: Narrative, Pictorial, and Theatrical Arts in Nineteenth-Century England* (Princeton: Princeton University Press, 1983).

[17] Brigitte Peucker, *The Material Image: Art and the Real in Film (Palo Alto, CA: Stanford University Press, 2007.*

[18] Tom Gunning, "The Non-Continuous Style of Early Film"; Valentine Robert, "The Pictorial in the Tableau Style," in *The Image in Early Cinema: Form and Material*, ed. Scott Curis, Philippe Gauthier, Tom Gunning, and Joshua Yumibe (Bloomington, IN: Indiana University Press, 2018), 289–99.

[19] Vito Adriensens and Steven Jacobs, "The Sculptor's Dream: Living Statues in Early Cinema," in *Screening Statues: Sculpture and Cinema,* ed. Steven Jacobs, Susan Felleman, Vito Adriansens, and Lisa Colpaert (Edinburgh: Edinburgh University Press, 2017).

[20] Roland Barthes, "Diderot, Brecht, Eisenstein," in *Image-Music-Text*, trans. Stephen Heath (New York: Hill and Wang, 1977), 70.

At once narrative, pictorial, and situational, tableaux can be single or serial, as in the epic stage scenes of Brecht and the motion picture shots of Eisenstein that Barthes discusses, as long as they represent "perfect instants" or pregnant moments with suggested pasts and futures. So, for instance, Artemisia Gentileschi's *Danaë* (1612) represents Danaë's visitation by Zeus, in the guise of a shower of gold, her impregnation by him, and her greedy chambermaid's pursuit of the coin, all in a single image, which gestures beyond the represented scene to the moments that precede and follow it. Indeed, for those familiar with the myth, it calls to mind the whole of the Argive princess's story: how her father, King Acrisius of Argos, attempting to prevent a prophesy that he would be killed by a grandson, imprisoned her in a tower; how she was impregnated by Zeus and bore a son named Perseus by him; how Acrisius locked her and the infant Perseus in a chest and sent them adrift at sea; how by the providence of the gods they drifted safely to the island of Seriphos; how she was held by King Polydektes and liberated after Perseus slayed the Gorgon, Medusa; and how she returned to Argos after Perseus, having thrown a discus that accidentally struck his grandfather dead, fulfilled the prophesy.

As a carefully laid out and framed representation, the tableau traverses media, history, and culture. But there is evidence that Diderot's tableau aesthetic was itself inspired by the magic lantern. In Diderot's discussion of Fragonard's paintings, as Michael Fried has noted, he describes a sequence of tableaux created as colorful images voiced and back-projected by a lantern onto a canvas screen in the manner of a phantasmagoria show and compares it to Fragonard's *Le Grand prêtre Corésus se sacrifie pour sauver Callirhoé* (1765). "These remarks and others like them," Fried asserts, "leave no doubt that Diderot meant his 'dream of a phantasmagoric … *Corésus et Callirhoé* to be understood as corresponding to the painting's

most salient features and overall atmosphere."[21] Having influenced Diderot's conception of the tableau in the late eighteenth century, the lantern was influenced by the tableau painting, the literary tableau, and the dramatic tableau in the nineteenth century, absorbing its effects, which vary from form to form.

Tableau paintings add a temporal dimension to a spatial medium. They tell what Meisel calls the "moment's story," in which "time asserts itself as a dimension of the immediate scene, as a function of space; and succession (the wage of response) appears in pictorial simultaneity."[22] In Poussin's *Blind Orion Searching for the Rising Sun* (1658), the giant Orion, having been blinded by King Oenopion on Chios and having placed Cedalion on his shoulders in Lemnos, walks to the East, where Helios will restore his eyesight. In John Everett Millais' *Ophelia* (1851–52)— incidentally English literary painting's most represented subject—Hamlet's lover, having been driven to insanity by the murder of her father, floats in the weeping brook before sinking to her death.[23] In Théodore Géricault's *The Raft of the Medusa* (1818–19), after weeks at sea, the desperate survivors of the shipwreck of the French Royal Navy frigate, Méduse, wave their arms at a distant ship in hope of rescue. Whether they represent mythological, allegorical, historical, religious, literary, or genre subjects (scenes from everyday life), tableau paintings are narrative paintings, as Julia Thomas has argued, which encourage spectators to "take a part in unraveling [their] meanings, and even to determine that [they are] to be 'read' in the first place."[24]

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[21] See Michael Fried, *Absorption and Theatricality: Painting and the Beholder in the Age of Diderot*, new ed. (Chicago: University of Chicago Press, 1988), 143, 234, fn. 78.

[22] Meisel, *Realizations*, 22.

[23] Richard Altick, *Paintings from Books* (Columbus: Ohio State University Press, 1985), 299.

[24] Julia Thomas, *Victorian Narrative Painting* (London: Tate, 2000), 30.

The literary tableau, as a verbal picture, lends a spatial dimension to a temporal medium. Here, we can consider any of the set pieces or vivid descriptions of striking moments in Dickens's fiction, such as the dramatic situations in *Oliver Twist* that he earmarked for illustration by Cruikshank: "Oliver escapes being bound to a Sweep," in which the magistrate decides not to sign the indentures; "Oliver's Reception by Fagin and the Boys," when Charley shows Oliver off to the gang; "The Meeting" between Nancy, Rose, and Mr. Brownlow; and so on. [25] In these tableaux, the settings, people, and objects are carefully laid out so as to create symbolic images, which interrupt the flow of the narrative. In doing so, they serve an emblematic as well as situational function. So, the famous tableau, "Oliver asking for More," the scene in which nine-year-old Oliver asks the master of the workhouse for more gruel, "crystallizes for the reader a whole range of its meanings," as Sally Ledger has argued in her discussion of "Dickens's engagement with the melodramatic mode," calling up the poverty, bad sanitation, child labor, and other ills of Victorian society that Dickens so vehemently criticized in his novels. [26]

There are two types of dramatic tableaux, both of which are absorbed and transposed by the classical lantern tableau. The first type of dramatic tableau, which influences the lantern tableau on the level of the image, introduces an element of stasis into the spatiotemporal medium of theatre. A key characteristic of the nineteenth- and early twentieth-century stage, it is a theatrical device, in which the actors strike an expressive pose during a critical phase of the

[25] See Jane R. Cohen, *Charles Dickens and His Original Illustrators* (Coumbus: Ohio State University Press, 1980), 20–22. See also Sally Ledger, "Don't be so Melodramatic!' Dickens and the Affective Mode," *19: Interdisciplinary Studies in the Long Nineteenth Century* 4 (2007*),* http://doi.org/10.16995/ntn.456.

[26] Ledger, "Don't be so melodramatic!'," 3.

drama and hold it for a certain period. As with the literary tableau, the dramatic tableau is a legible symbolic composition, which, according to Meisel, "crystallizes a stage of the narrative as a situation, or summarizes and punctuates it."[27] In the medium of theatre, the tableau arrests movement and action as it pictures a situation and underscores its resonances. Accordingly, it lends itself to dramatic climax and often appears at the end of acts, where it is typically indicated by the simple stage direction, "—*Tableau*."

But dramatic tableaux are far from simple. Take, for example, the calamitous ending of Nikolai Gogol's dramatic satire, *The Government Inspector* or *The Inspector General* (1836). The tableau takes place after the final scene, in which the corrupt officials of a small Russian town, having realized that Hletstakov, the foppish civil servant who accepted their bribes, is an imposter, are notified of the actual Inspector General's arrival:

> LAST SCENE
>
> GENDARME: the official who has come from Petersburg by imperial order demands your instant appearance before him. He is stopping at the inn.
>
> (*The words just pronounced strike all like a thunderbolt. A sound of astonishment escapes from the lips of all the ladies at once; the whole group, having suddenly changed its position, remains as if petrified*.)
>
> DUMB SHOW
>
> *The* CHIEF OF POLICE *stands in the midst like a post, his arms outspread and his head tilted backwards; on the right his wife and his daughter appear on the verge of rushing towards him; beyond them the* POSTMASTER, *transformed into a question mark, is turned towards the spectators; beyond him* LUKA LUKICH, *in the most innocent bewilderment; beyond him, at the very edge of the scene, three lady guests are leaning towards each other with the most sarcastic expressions of countenance, aimed directly at the* POLICE CHIEF'S FAMILY. *On the* POLICE CHIEF's *left stands* ZEMLYANIKA, *his head inclined somewhat to one side, as if he were listening to something; beyond him the JUDGE, with outspread arms, almost squatting on the floor, and making*

[27] Meisel, *Realizations*, 45.

> *movements of the lips as if to whistle or say, "So you see what you've come to, old lady!" Beyond him is* KOROBKIN*, turned towards the spectators, with one eye cocked and a derisive gesture toward the* CHIEF OF POLICE; *beyond him, on the extreme side,* DOBCHINSKY *and* BOBCHINSKY *make movements of their hands towards each other, their mouths open, and regarding each other with bulging eyes. The other guests simply stand like statutes. For nearly a minute and a half the group remains in this position.*
>
> THE CURTAIN FALLS [28]

Gogol's stage direction in *The Government Inspector* is particularly detailed and evocative, and it highlights a significant characteristic of the dramatic tableau: it is not merely a case of arrested movement—a group of actors frozen in place by Medusa's gaze—but a static composition made up of diverse attitudes, gestures, and expressions, aligned with character, situation, and motivation. Indeed, regarding the question of whether his "dumb show" might cramp the style of the actors, Gogol himself states,

> It is only the grouping that is composed. In this dumb show there is infinite variety. The panic of each character is as different as his nature. The extent of his fear depends on the extent of his transgressions. The Mayor is struck dumb in a different way from his wife and daughter; the Judge is scared in a different way, and so are the Postmaster, the Inspector of Schools, etc.… In short, everyone has to carry on with his part in mime.[29]

The actors are expected to *act in stillness*, or remain in character in their respective attitudes, arranged to represent a main theme or idea—in this case, the depravity at the heart of Russian bureaucracy. A dramatic tableau, then, is an emblematic stage picture that interrupts an action in

[28] Nicolai Gogol, *The Inspector General*, trans. John Laurence Seymour and George Rapall Noyes (New York: Dover, 1995), 70–71.

[29] Gogol, *The Inspector General* , ix.

order to expose the conflicting forces in a drama, or as Walter Benjamin argues with regard to the epic theatre of Brecht, uncover (make strange, alienate) “a certain set of conditions.” [30]

The second kind of dramatic tableaux is the stage picture more generally, which in its serialized form is the most important influence on the tableau style of lantern narrative. This tableaux structure arose from the aesthetic promoted by Diderot, wherein the application of the “laws of picturesque composition” are applied to pantomime, and “the spectator is in the theater as before a canvas, on which various tableaux follow each other as if by magic.”[31] In this second sense, dramatic tableaux are pictorially conceived units of a play, demarcated by the settings in which actions are performed, and determined by changes in place, time period, and atmosphere.[32] Accordingly, dramatic tableaux often, but not necessarily, correspond to scenes: that is, if two scenes take place in the same setting, there is one tableau; if they take place in different settings, there are two tableaux. So, in Klaw and Erlanger’s long-running dramatic adaptation of *Ben-Hur* (1899) there is no change of setting between the scenes “Fountain of Castalia” and “Revels of the Devadasi” in Act III. It is a play in six acts, thirteen tableaux, and fourteen scenes:

Prelude: Appearance of the Star to the Wise Men
Act I, Tableau 1. Roof-Terrace of the Palace of Hur, Jerusalem.
Act II, Tableau 1. Between Decks of the Roman Trireme, “Astrea.”
Act II, Tableau 2. The Open Sea.
Act III, Tableau 1. Room in the House of Simonides in Antioch.
Act III, Tableau 2. Temple of Apollo.
Act III, Tableau 3. Fountain of Castalia.

[30] Walter Benjamin, “What is Epic Theatre?” (second version), *Understanding Brecht*, trans. Anna Bostock (London: Verso, 1998), 18–19.

[31] Michael Fried, *Absorption and Theatricality*, *Painting and Beholder in the Age of Diderot*, new ed. (Chicago: University of Chicago Press, 1988), 78.

[32] Ben Brewster and Lea Jacobs, *Theatre to Cinema* (Oxford: Oxford University Press, 1997), 31.

Act III, Tableau 3.	Revels of the Devadasi.
Act IV, Tableau 1.	Dowar of Sheik Ilderim in the Orchard of Palms.
Act IV, Tableau 2.	Lake in the Orchard of Palms.
Act V, Tableau 1.	Exterior of the Circus, Antioch.
Act V, Tableau 2.	In the Arena
Act VI, Tableau 1.	Room in the Palace of Hur, Jerusalem.
Act VI, Tableau 2.	Tombs of the Lepers, Vale of Hinnom.
Act VI, Tableau 3.	The Miracle.

This distinction between tableaux and scenes in *Ben-Hur* might seem hairsplitting, but it is important for at least two reasons. First, it underscores the fact that tableaux and scenes serve different functions: the former are thematic units; the latter are units of action. Second, it demonstrates the extent to which they merge in nineteenth- and early twentieth-century theatre, where, as Ben Brewster and Lea Jacobs have shown, narrative is treated "as a series of pictorially representable moments,"[33] and plot "as a way of producing and resolving situations, momentary states embodying in extreme form the causal tensions that drive the story."[34] Indeed, what we might call *tableaux dramaturgy*—termed "stage pictorialism" by Brewster and Jacobs and "pictorial dramaturgy" by Meisel—is the dominant style in toga melodramas like *Ben-Hur*, abolitionist melodramas like *Uncle Tom's Cabin*, and the lantern tableaux that remediated them. Here, narrative is divided into autonomous tableaux centered on situations and presented in alternation—"as the layers of red and white in a side of streaky, well-cured bacon," as Dickens famously stated about "all good murderous melodramas"—or in succession, like pictures in an exhibition.[35]

[33] Brewster and Jacobs, *Theatre to Cinema*, 9.

[34] Brewster and Jacobs, *Theatre to Cinema*, 171.

[35] Charles Dickens, *Oliver Twist, or the Parish Boy's Progress* (London: Richard Bentley, 1840), 271.

Uncle Tom's Cabin

Having explored tableaux across media, we can now examine the lantern's reciprocity with dramatic tableaux by way of the lantern series, *Uncle Tom's Cabin* (Briggs-Beale, 1882). As I shall show, the series demonstrates perfectly the classical tableaux style of lantern narrative, which is based on an image-as-scene approach, and which represents a form of cross-pollination between the lantern and the dramatic tableau. Before examining the series, however, I will provide a brief plot summary of Harriett Beecher Stowe's novel, *Uncle Tom's Cabin; or, Life Among the Lowly* and describe the intertwining histories of the novel, the stage drama, and the lantern drama in the 1850s.

Uncle Tom is a slave who lives in Kentucky at a farm owned by Arthur Shelby. At the beginning of the novel, Shelby is forced by the slave trader Haley to sell Tom and Harry, the son of Mrs. Shelby's maid, Eliza. Eliza warns Tom and tells him of her plans to run away with Harry and join her husband, George Harris, who has just escaped from the neighboring plantation and is headed to Canada. Pursued by Haley, Eliza crosses the frozen Ohio River by leaping from ice floe to ice floe, and eventually reaches Canada with George and Harry. Deciding to accept Shelby's decision, Tom says goodbye to his family and young George Shelby and is taken by Haley to a steamboat heading to New Orleans, where he will be sold at the slave market. On the boat Tom meets little Eva, who is returning home with her father, Augustine St. Clare, and rescues her when she falls into the river. St. Clare buys Tom and Topsy, an unruly slave child, who both develop deep friendships with Eva. Eva becomes very ill and, on her deathbed, asks her father to promise to free Tom and the other slaves, but before he can follow through on his promise, St. Clare is fatally stabbed, and Tom is sold to a vicious planter named Simon Legree. When Tom refuses to whip a slave woman and to reveal the whereabouts of other slaves who

have recently fled the plantation, Legree beats him to death. Before Tom dies, George Shelby, now a young adult, arrives to buy Tom's freedom, but finds he is too late. At the end of the novel, Eliza, George, and Harry Harris are starting out on a journey to Liberia, where they will start a new life.

Immediately following the publication of Stowe's popular novel in 1852 (first published as a serial in the abolitionist newspaper, *The National Era* in 1851), several dramatic versions appeared in New York: Charles Western Taylor's version at Purdy's National (August 23, 1852); H. J. Conway's adaptation produced at Barnum's Museum (November 15, 1852); and George L. Aiken's dramatization at the Museum in Troy, NY (September 17, 1852) and The Chatham Theatre at 143-9 Chatham Street (now Park Row), managed by A. H. Purdy (July 18, 1853) and rechristened Purdy's New National. Among these, Aiken's version served as the basis for the majority of subsequent productions into the twentieth century.

On September 12, 1853, two months after the opening of Purdy's production of Aiken's adaptation, a lantern version of *Uncle Tom's Cabin* was performed on the same block at the Franklin, 175 Chatham Street. A variety theatre since 1842 that seated 550 and featured two performances a day, the venue was managed by George Lea, who upon taking over in 1848, renamed it the Franklin Museum in imitation of Barnum's American Museum, then the city's most popular exhibition venue. Barnum himself was possibly the first American exhibitor of dissolving views and the chromatrope, which he acquired at the Royal Polytechnic Institution in London in 1844 along with high-end lanterns, and the American Museum slide shows remained part of his weekly variety bill into the 1850s, when his lecture room was converted into a

theatre.[36] The performance lineup was: Lea's Female Minstrels; a ten-minute intermission; "Diorama of Uncle Tom's Cabin exhibited in twenty-four tableaux, illustrating all the events of that play"; "Miscellaneous and Terpsichorean Divertissement" (a dozen song and/or dance acts); a sketch entitled "The Barber's Shop in an Uproar"; a second ten-minute intermission "to arrange the stage for the Tableaux Vivants, by Lea's Troupe of Model Artists."[37]

Lea was, without a doubt, a savvy showman who placed a brass band on the balcony to draw crowds to his exhibition of "magic-lantern views" of *Uncle Tom's Cabin*. As T. Allston Brown noted in his *A History of the New York Stage* (1903), "Many a 'country cousin' found him or herself [at the Franklin] who thought it was Purdy's place of amusement."[38] And while we may never know what images and script were used in Lea's lantern adaptation, several details of this exhibition are telling. First, its appearance during the first run of Aiken's dramatization demonstrates the lantern's synchronic and symbiotic relations with the novel and the legitimate stage. While lantern adaptations of literary texts were common enough—there were nearly as many lantern series of *Robinson Crusoe* as there were of the Bible—a lantern version of *Uncle Tom's Cabin* within a year of the novel's publication is striking. Likewise, given the fact that the lantern version aimed to present all of the events in the play in twenty-four tableaux, it was clearly capitalizing on the success of Aiken's play. The contemporary lantern version of *Uncle*

[36] See Erkki Huhtamo, *Illusions in Motion: Media Archaeology of the Moving Panorama and Related Spectacles* (Cambridge MA: MIT Press, 2013), 240, fn 54.

[37] T. Allston Brown, *A History of the New York Stage*, 3 vols. (New York: Dodd, Mead and Company, 1903): Vol. I. 261–62.

[38] Brown, *A History of the New York Stage,* 261–62.

Tom's Cabin shows the lantern's active engagement in the mid-nineteenth-century entertainment environment.

Second, the description offers some indication of the nature of the presentation. It shows, for instance, that it was not conceived or promoted as excerpts of the play, but rather as a complete performance of *Uncle Tom's Cabin*, presented scene-by-scene and image-by-image, with each scene represented by a lantern tableau. Its running time, of course, was considerably shorter; the production of Aiken's play at the Chatham (since rechristened the National Theatre) was a very long six acts, thirty scenes, and eight tableaux, themselves "serving to sum up a specific narrative point in pictorial form," as Brewster and Jacobs put it.[39] The lantern *Uncle Tom's Cabin* probably included the eight tableaux in Purdy's production and sixteen other key scenes. The tableaux were: "The Escape of Eliza"; "The Trappers Entrapped"; "The Freeman's Defense"; "Death of Little Eva"; "The Last of St. Clare"; "Topsy Butting the Yankee"; "Cassy Helping Uncle Tom"; and "Death of Uncle Tom."[40]

Finally, the historical specificity of the performance can shed some light on the form of the series. Given the year of the presentation, it is probable that the lantern tableaux were based on painted slides. While photographic lantern slides existed in 1853—the Langeheim's introduced their hyalotypes at the Crystal Palace Exposition in 1851—their use was limited to nonfiction subjects (many of which were scenic, as in the Langenheim's many views of Niagara Falls) until the 1870s. It is also likely that they were derived from Hammatt Billings's illustrations for the novel, which were probably the basis of the dramatic tableaux and would

[39] Brewster and Jacobs, *Theatre to Cinema*, 34.

[40] Playbill for *Uncle Tom's Cabin, Or, Life among the Lowly*, n.d.

have thus been doubly familiar to audiences.[41] Further, in order to be exhibited successfully in a variety theatre with a seating capacity of 500, the lantern tableaux were possibly illuminated by limelight, which was first used for long-distance signaling in the 1820s (the Drummond light), adapted to magic lanterns in England in the late 1830s, and commercially available in the US in the mid-1850s. And given the use of the word "Diorama" to describe the performance, the Franklin probably employed a double lantern, in which two systems are placed side by side, and exhibited the tableaux in the manner of the dissolving view exhibition, a lantern transposition and transformation of Daguerre's Diorama.

The Diorama (1822) was a purpose-built apparatus consisting of a movable black box auditorium, and two large transparent paintings, both performed for fifteen minutes, for a total of thirty minutes. Each dioramic picture displayed two effects—day and night—and all of the imperceptible transitions between them in a temporally continuous manner. After the first picture, the black box was rotated so that the second image was displayed in its aperture. Shortly after the Diorama was first shown in London in 1823, the technique was adapted to the lantern form as dioramic lantern entertainments, also known as scenic metamorphoses, dissolving transformations, and eventually, dissolving views.[42] With dissolving pairs of perfectly registered related images, the lantern could slowly blend a daytime view into the same scene at night, as with the pictures in the Diorama, but it could also apply this technique to multiple scenes (the four seasons), moveable slides (the eruption of Mt. Etna, a ship rocked by waves), allegories

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[41] For a discussion of the dramatic realizations of Cruikshank's *The Bottle*, see Meisel, *Realizations*.

[42] See Jeremy Brooker, *The Temple of Minerva: Magic and the Magic Lantern at the Royal Polytechnic Institution, London, 1837-1901* (London: Magic Lantern Society, 2015), 51.

(The Rock of Ages), and dream balloons. Dissolving view effects thus show the extent to which the transitions between lantern images serve a representational function.

Figure 2.3 Dissolving Views in *Street Fire* (Riley Bros., in or before 1905)

They also demonstrate the lantern's ongoing reciprocity with the legitimate stage. For exhibitions of dissolving views often presented unrelated images, and according to Meisel, this format was closely related to that of pictorial dramaturgy: "Each picture, dissolving, leads not into consequent activity, but to a new infusion and distribution of elements from which a new picture will be assembled or resolved. The form is serial discontinuity, like that of the magic lantern, or the so-called 'dissolving views.'"[43] In turn, dioramic lantern entertainments like *Uncle Tom's Cabin* at the Franklin Museum were treated like a series of dramatic tableaux; each lantern tableau presented a complete action in a distinct setting, which dissolved into a new action in a new setting, and so on.

But while series like *Uncle Tom's Cabin* are designed for dramatic presentation, lantern tableaux series are able to accommodate a range of approaches; they exist along a continuum of showing and telling. A lantern tableau narrative of *Ben-Hur*, for instance, while ideally suited for performing the drama, could also be used to summarize the novel, or as the basis of a lecture

[43] Meisel, *Realizations*, 38.

about Lew Wallace or Klaw and Erlanger's play. One series was in fact recycled in a nonfiction series on "Jewish Life" and used in the rituals of the fraternal organization, the Tribe of Ben-Hur.[44]

To illustrate some of this variation, let us examine a scene from a lantern version of *Uncle Tom's Cabin*, produced by the Philadelphia-based C. W. Briggs Company and designed by Joseph Boggs Beale in 1882.[45] The series is largely based on the illustrations by Hammatt Billings in Stowe's novel and relies heavily on Aiken's dramatization. Thus, although it consists of twelve tableaux rather than twenty-four, it is likely that the style of the series is similar to the one performed at the Franklin thirty years earlier. The tableaux are:

No. 1.— George Harris Taking Leave of His Wife.
No. 2.— An Evening in Uncle Tom's Cabin.
No. 3.— Escape of Eliza and Child on the Ice.
No. 4.— Uncle Tom Sold and Leaving His Family.
No. 5.— Eva St. Clair Makes a Friend of Uncle Tom.
No. 6.— Uncle Tom Saves Eva from Drowning.
No. 7.— George Harris Resisting the Slave-Hunters.
No. 8.— Eva and Topsy.
No. 9.— Eva Reading to Uncle Tom.
No. 10.— Eva's Dying Farewell.
No. 11.— Legree's Cruelty to Uncle Tom.
No. 12.— Death of Uncle Tom.

[44] See Artemis Willis, "The Lantern Image between Stage and Screen" in *The Image in Early Cinema: Form and Material,* 237–46.

[45] See Terry Borton and Deborah Borton, *Before the Movies: American Magic Lantern Entertainment and the Nation's First Great Screen Artist, Joseph Boggs Beale* (Bloomington, IN: Indiana University Press, 2014). Briggs was one of the leading producers of lantern series in the United States, and from 1881 to 1909, Beale, an illustrator who drew for *Frank Leslie's Weekly* and other magazines prior to his lantern work, was their most prolific designer.

Figure 2.4. *Uncle Tom's Cabin* created by Joseph Boggs Beale for the C. W. Briggs Co. (1882)

In the scene, "Eva's Dying Farewell" Eva is placed in the center of the composition, resting on a chaise, with locks of her golden hair in her lap. Her facial expression is serene, and her left hand is raised in a gesture of benediction. To the left of Eva, St. Claire and Aunt Ophelia are grieving, behind her Mrs. St. Clare is sobbing, and to the right are a group of slaves, standing, kneeling, and praying. The accompanying reading, which was distributed by Briggs as a supplement to the series, is told in the grammatical third person and treats the scene like an end-of-scene tableau. It begins in the days following the previous scene, "Eva Reading to Tom,"

(which would be represented by the dissolve), describes Eva’s failing health and her request to cut her locks and summon the slaves to her room, and ends with the climactic farewell.

Figure 2.5. “Eva’s Dying Farewell” by Beale/Briggs (1882), Hammatt Billings (1852), and W. Butcher and Sons (1910–12)

> No. 10—Eva’s Dying Farewell
> The friendship between Uncle Tom and Eva grew stronger and deeper, day by day. It would be hard to say what place she filled in his hard, desolate heart. He loved her with a deep and fervent tenderness and reverence, and almost worshiped her as something angelic and divine. He was always on the lookout for the rarest flowers and the choicest fruit. Nor was Eva less zealous to return kind deeds. Eva was a beautiful reader, with a quick, poetic fancy and an instinctive sympathy with what is grand and noble, so that to Tom the reading was wonderful. She read about the New Jerusalem, and Tom sung from his hymn book about the "spirits bright" that dwelt there "all robed in white," and she said she had seen them, that they came to her in her sleep. When she said that, the thought came to him for the first time that Eva was "fading away." Her hands were thinner, her breath shorter, and when she played in the garden she tired sooner and seemed more languid. He had heard Miss Ophelia speak of her cough, that medicine had failed to cure, and even then her hands were feverish and the hectic flush upon her cheeks. Miss Ophelia called her in and noticed her condition, and communicated her fears to her father. He was so unwilling to have it so that he tried to disbelieve it. But it was plain the fear had entered his heart. He kept by her more than ever, took her oftener to ride, and brought home remedies for her. There was a daily increasing maturity to the child's feelings and thoughts. She often made remarks that seemed almost an inspiration. Soon after this St. Clare called Eva to him, and as she came her beauty was so intense and so fragile that it impressed him painfully. "Papa," said Eva, "I have wanted to say things to you for a good while; it is no use keeping it to myself any longer; I am going to leave you never to come back!" After she was obliged to keep her room she requested to have her hair cut, and

> then to have all their people come to her room. She told them she had sent for them because she loved them, and that she was going to leave them. There were groans and sobs and lamentations; then she said, "If you love me, listen; I want you all to be good, so that you can come where I am. I am going to give you all a curl of my hair, and when you look at it, think that I loved you and am gone to heaven." They fell on their knees, they sobbed and prayed and kissed the hem of her garment. But the change was near and the transition was peaceful and joyous.

Two additional readings adopt distinctly different approaches to the scene. The second reading, also published in the 1880s by Alfred Pumphrey, a Birmingham-based lantern and slide dealer and slide producer, covers less story time in more words; it is considerably longer than the Briggs reading. It also uses much more dialogue and adopts a Christian emphasis. It begins with Eva's discussing her wishes with St. Clare, devotes a full page to the farewell (which is very sermon-like), and ends with an exchange between Eva and St. Clare concerning Eva's Christian faith.

> NO. 14.—"Papa, my strength fades away every day, and I know I must go. There are some things I want to say and do, that I ought to do; and you are so unwilling to have me speak a word on this subject. But it must come; there's no putting if off.
> Do be willing I should speak now?"
> "My child, I *am* willing," said St. Clare, covering his eyes with one hand, and holding up Eva's hand with the other.
> "Then I want to see all our people together. I have some things I *must* say to them," said Eva.
> "*Well*!" said St. Clare in a tone of dry endurance.
> Miss Ophelia despatched (sic) a messenger, and soon the whole of the servants were convened in the room….
> [A long goodbye scene follows, after which St. Clare asks Eva why she did not give him a curl of her hair.]
> "I only gave them to our poor people myself because, you know, papa, they might be forgotten when I am gone, and I hoped it might help them remember…. You are a Christian, papa?" said Eva doubtfully.
> "Why do you ask me?"
> "I don't know, You are so good, I don't see how you can help it."
> "What is being a Christian, Eva?"
> "Loving Christ most of all," said Eva.
> "Do you, Eva?"
> "Certainly I do."

> "You never saw Him," said St. Clare.
> "That makes no difference," said Eva. "I believe him, and in a few days I shall see Him;" and the young face grew radiant with joy.[46]

The third reading, published by the London firm, W. Butcher & Sons as a supplement to their series of 1910–12, treats the farewell as a mid-scene tableaux, preceded by Eva's request and followed by St. Clare's death. Published some thirty years after the Briggs and Pumphrey readings, it covers more story, less time passage, and uses equal amounts of dialogue and description, reflecting a much more modern approach to the scene.

> 13. "Papa," said Eva, "I'm going away … and I'm never coming back. Oh, papa, how can I leave you! It breaks my heart."
>
> "Oh, child, Eva, don't talk to me so," said her father, with a groan. "You are all I have on earth." Mr. St. Clare took her up in his arms and carried her to bed.
>
> "Mamma," said Eva, in the morning, "I want to have some of my hair cut off and give to our people." Miss Ophelia came with her scissors and cut off several long locks. Then all the slaves were gathered in the room. They were very silent; for, as they saw Eva lying back on her pillows, they knew that she had summoned them to say good-bye. One by one the slaves came up to the bed, and took a little piece of hair that Eva held out to each, and then left the sick chamber. At last all were gone but Tom and old Mammy, the mulatto woman.
>
> "Here, Uncle Tom," said Eva, "I have kept a nice one for you. Oh, Tom, I am so happy and glad to go—except for leaving poor papa."
>
> When the morning of the next day came, little Eva had passed into the other world.
>
> Her father would soon go to her. One Evening Mr. St. Clare went into a club. As he was reading a quarrel arose between two men. Mr. St. Clare jumped up to separate them, but the men had drawn their knives on each other, and as he tried to wrest one of the knives out of the man's hand, he received a stab in the side. The wound was fatal and within a few days Eva's father had gone to join his little girl. The sudden death of Mr. St. Clare struck consternation and terror into the minds of all his household.

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[46] "Readings from Uncle Tom's Cabin, To Accompany Original Pictures," in *Popular Lantern Readings: Volume I* (Birmingham, England, nd), 128–130.

But generic lantern readings, as discussed in the previous chapter, can only tell us so much about lantern performances, even when they are marked up in the manner of prompt books. Another way to explore the tableau style in lantern narratives is by adopting a media-comparative approach. Yuri Tsivian, for instance, has explored the differences between the screen and theatre by asking the generative question, "What can they do on film that they cannot do on stage?"[47] Following Tsivian's line of inquiry, let us examine three versions of *Uncle Tom's Cabin*: the Briggs/Beale series, which was still in circulation in c. 1900; William A. Brady's stage revival of 1901; and Edwin S. Porter's film of 1903.

The Brady stage revival was presented at the Academy Theatre, a house ideally suited for a show featuring hundreds of performers on stage at the same time, as well as a variety of special effects. The proscenium opening was 44 feet wide by 40 feet tall; the stage extended 66 feet from the edge of the apron to the back wall; the stage house was 70 feet high, with 14 feet beneath it, six traps, and 36 feet at the first four wing entrances and 76 at the fifth and sixth. Thus the production featured a liberal use of spectacle—sensation scenes such as Eliza's escape across the ice—and sophisticated mise-en-scène, as in a spectacular set of the St. Claire mansion. However, the stage picture varied greatly from different seats in the house. Moreover, the scale in the theatre is always homogenous, with the human figure being the consistent unit of measurement throughout the representation. Thus the presentation of a small and intimate scene like Eva's Dying Farewell must be played within the vastness of the stage space.

Porter's film, on the other hand, was able to represent things in any scale it wanted. The screen is free from constraints of scale imposed by the human figure. Moreover, the relation of

[47] Yuri Tsivian, "What Can We Do in Films that They Cannot on Stage? Film Style and Medium Specificity in the Cinema of the 1910s," *Theater and Film Studies* 1 (March, 2009): 3–50.

the figures to one another on the screen is the same for the entire film audience. However, the cinema, being the medium of motion *par excellence*, is not well-suited for the presentation of tableaux, the main pictorial-dramaturgical unit in a range of melodramas with stage, screen, and lantern versions—from abolitionist melodramas like *Uncle Tom's Cabin* to toga melodramas like *Ben-Hur* to temperance melodramas, fireman melodramas, and so on. The narrative richness of tableaux, I would suggest, is impoverished by the temporal limitations of motion pictures. It seems they are always too fleetingly short—Porter's "Death of Eva" scene lasts a mere forty-five seconds, from title to apotheosis—or too tediously long, which is probably why the tableau ultimately had to be transformed by such devices as the close-up.[48]

The lantern solves both logistical problems of viewing positions in the theatre and temporality in the cinema. In lantern tableaux performances, audiences share the same view of the screen (it's still a two-dimensional affair), and the tableaux themselves are not bound by any temporal restrictions; they are temporal but not time-bound. However, unlike motion pictures, lantern tableaux can only live in performance, and unlike stage melodramas, lantern melodramas don't typically begin *in media res*, but rather with prologues. The Briggs/Beale script for *Uncle Tom's Cabin*, for instance, commences with a rather long passage concerning George Harris's backstory (as if it was necessary to establish the motivation for his escape from the plantation!) before turning to the scene itself, in which he discusses his plans to flee to Canada with Eliza.

To sum up: in the lantern's classical tableau style, each tableau is a pregnant image or micro-narrative that represents a scene on the screen, with the dissolves/transitions between lantern tableau representing the breaks between scenes. Lantern melodramas in the classical style

[48] See Brewster and Jacobs, *Theatre to Cinema,* Chapter Two, "The Fate of the Tableau in the Cinema," 39–64.

are thus largely on-screen events, with each tableau activating on-screen space and time of the scene in a theatrical, presentational, and legible fashion. The lantern tableau is privileged, and performed through external commentary, sound effects, music, and projection itself—the length of transitions, the superimposition of effects, the duration of projection, and so on. Classical lantern tableaux are thus extremely flexible; each tableau can be performed for as long or as short as the situation requires. With their capacity for consolidation-expansion, classical lantern tableau narratives are akin to the bellows of an accordion, wherein the same story can be told in twenty minutes or an hour, depending on the combined whims of the lanternist and the audience.

Enoch Arden's Departure

Let us return to TWHBMHSHS, York's treatment of "Enoch Arden's Return," and to its mysterious departure from the other treatments of the scene. Even to the untrained eye, this difference is patently obvious. However, the basis of this difference is less clear: on the one hand, TWHBMHSHS functions as a lantern tableau in that it realizes a scene in a self-contained image; on the other hand, it departs from the tableau in that it is not a legible, pregnant moment caught between past and future. As with all of the Life Model tableaux in York's *Enoch Arden*, TWHBMHSHS is an ambivalent lantern tableau that reads more like a fragment, and yet performs a whole scene. At first glance, *Enoch Arden*'s departure seems related to the medium of photography, and/or to the fact that it is designed to rely more on the text of the poem than on audience familiarity. However, as I argue, a closer look at the images and performance shows that it is based on the lantern's ongoing reciprocity with the legitimate stage as it transitions from externalized situations to the projection of inner states in the late nineteenth century.

TWHBMHSHS is the only version of Enoch Arden's Return that doesn't portray the whole scene—that is, what Enoch saw. The Currier and Ives lithograph, "Enoch Arden—The Hour of Trial," shows all of the details in Tennyson's set piece plus the "tall-tower'd mill" in the background. In the Mathison play, Enoch enters the scene "exterior of Philips house by moonlight," delivers a rather long monologue that concludes with "yet before I die I fain would look on that beloved face again," and as he slowly proceeds to the window, a tableau of the family is disclosed. The tableau vivant version, as described in William Gill's *Parlor Tableau and Amateur Theatricals* 1871, positions Enoch in the foreground to the right of the center of the stage, "his left hand upon his breast, his right extended, palm downwards, and his face turned upwards with an earnest, supplicating expression," and the family arranged as per Tennyson's scene, illuminated brightly behind a window frame of about four feet square. ("Music, 'Home, sweet home.'")[49] The photographic tableau by Catharine Weed Barnes adopts a similar representational strategy. Across all of the other forms, then, the whole scene is encapsulated in the image and presented to its audience in the manner of a tableau.

Figure 2.6 Enoch Arden's Return by Currier and Ives (1869), York & Son (1890) and Catharine Weed Barnes (1890)

[49] Gill, *Parlor Tableaux*, 134–**3**5.

TWHBMHSHS thus departs from the tableau aesthetic that André Gaudrealt describes as being "founded on the unity of action, space, and time," and that characterizes nineteenth-century paintings, illustrated novels, and stage melodramas.[50] The fact that it represents a scene from a poem by Tennyson makes this departure all the more enigmatic. Tennyson himself was a promoter of literary paintings, and his technique was "rather like that of a narrative painter to begin with," as Meisel argues, "the story becomes a 'situation,' a moment of poise" with the dramatic effect of a "mid-scene tableau" and "a discreet temporal ambiguity in the assemblage of the several telling gestures put before us."[51] Thus TWHBMHSHS is also a departure from the style that characterizes a classical lantern tableau, such as the "Death of Little Eva." How can we account for this stylistic anomaly?

One could argue that it is based on a difference in medium—the fact that Uncle Tom's Cabin is drawn and painted and *Enoch Arden* is produced by photography. However, nineteenth-century photographic tableaux generally conform to the tableau aesthetic. Oscar Rejlander's allegorical *Two Ways of Life* (1857) is staged after Raphael's tableau, *School of Athens* (1511). Michael Burr's *The Death of Chatterton* (1861) is a stereographic realization of Henry Wallis's narrative painting, *Chatterton* (1856).[52] The twelve large-scale photographs in Julia Margaret Cameron's photographic edition of Tennyson's *Idylls of the King* (1874) are extensive incorporations of the serial tableau.

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[50] André Gaudrealt, "Editing: Tableau Style," in *Encyclopedia of Early Cinema*, ed. Richard Abel (New York: Routledge, 2005), 210.

[51] Meisel, *Realizations*, 35.

[52] See Denis Pellerin and Brian May, *The Poor Man's Picture Gallery: Stereoscopy versus Paintings in the Victorian Era* (London: London Stereoscopic Company, 2014).

One could also argue that TWHBMHSHS's style, particularly its fragmentary quality, is based on a greater emphasis on the recitation of Tennyson's poem than on its "known moments." In other words, it is designed to rely less on audience familiarity with the story than on the recitation that explains or completes it. However, this is only partially accurate. Both *Uncle Tom's Cabin* and *Enoch Arden* employ an image-as-scene approach, perform the scene by projection and exhibition aids, and assume audience familiarity—Charles Musser's point that audience's foreknowledge provided narrative comprehension of a film's story in the early, exhibitor-dominated years of cinema also applies to lantern performance.[53] However, their means are inverted. In the former, each of the images represents a unity of action, a crystallization of the situation that is able to encompass the scene in projection. The images in the latter, on the other hand, only show part of the event, or an abstraction of it, because Life Model tableaux are designed to represent more of the dramatic events off-screen.

TWHBMHSHS's difference, then, is based on the particular style of Life Model tableau. Several chief organizational and compositional elements characterize this style. First, whether they represent interior or exterior scenes, Life Model tableaux almost always feature costumed models posed in front of flat painted backdrops with minimal set dressing and props. While the backdrops are painted in perspective, they do not present the illusionary effect of a *tromp l'oeil* painting. Rather, the distinction between the models and the scenery is clear and stylized. Their particular reality effect is based on the fact that real people portray their scenes. The scenes themselves are enframed and presented frontally and horizontally, and the shot scale is consistent; models are almost always shown from head to foot. The composition often centers on

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[53] See Charles Musser, *Before the Nickelodeon: Edwin S. Porter and the Edison Manufacturing Company* (Berkeley: University of California Press, 1991), 243–44.

the main action and represented by a small number of models/characters who never enter or exit the frame or address the spectator directly. The characters rarely make facial expressions or gestures related to acting. In fact, in many cases, the characters' faces are intentionally obscured, or shown, as with Enoch's face in TWHBMHSHS, in profile perdu.

Perhaps the most striking feature of the Life Model tableau style is the fact that characters are often portrayed with their back turned toward the camera. Indeed, among the 100-plus dramatic Life Model slide series I have surveyed that are complete, nearly every set has at least one image in which at least one character's back is facing the audience. In their article on of British Life Model slide sets produced between 1880 and 1910, Joe Kember and Richard Crangle note that it was "more important to register the figure as a character described in the narrated story" than as a performer: "even the principal models are treated more or less as visual objects, not unlike items of scenery and furniture."[54] For Kember and Crangle, this treatment was part of an overall strategy for fostering recognition and projection in audiences and to encourage their emotional engagement. The Life Model tableau's minimalist approach to props, scenic details, and especially the expressiveness of the characters is allied with an openness aimed at allowing audiences to make meanings, to empathize with characters, and to complete what we might think of as the lantern show in the head of the spectator.[55]

This practice, of course, was in direct contrast to the blocking practices of the melodramatic stage, where characters face the audience. And yet, a new style was emerging in

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[54] Joe Kember and Richard Crangle, "Folk Like Us: Emotional Movement from the Screen and the Platform in British Life Model Lantern Slide Sets 1880–1910," *Fonseca: Journal of Communication* no. 16 (2018): 120.

[55] See Miriam Hansen, "Alexander Kluge, Cinema and the Public Sphere: The Construction Site of Counter-History," *Discourse*, no. 6 (Fall 1893): 59.

the legitimate theatre that was against external and theatrical devices like the tableau. For example, consider Émile Zola's impassioned plea for "Naturalism on the Stage," in which he argued that the "tricks of the trade, the contrived formulas, the tears and superficial laughs" should be replaced by "the development of naturalism already achieved in the novel."[56] Zola himself already adopted this approach in in his 1873 stage adaptation of his 1868 novel, *Thérèse Raquin.* "In place of a theatre of fabrication," he delares, "we shall have a stage of observation."[57] Or consider August Strindberg's adoption of the techniques of Naturalism, such as stark scenery, unaffected dialogue, and interest in psychological realism in *Miss Julie* (1888). In a review of a production of the play in Paris in 1893, a critic from the *New York Times* stated, "M. Strindberg … *hopes to see an entire scene given by any actor turning his back to the public*, forgetting its presence."[58] According to Meisel, the late nineteenth-century stage saw a "shift in the standards of representational realism" in which the aesthetic ideal of the pictorial stage was in decline: "Well before the end of the century," he argues, "the standard of the real enters into an alliance with the sociological and the psychological."[59]

It is my contention that this emerging aesthetic conception of the stage picture influenced the Life Model style of lantern narrative, and in part, explains its departure from the tableau style of lantern narrative, in which serial discontinuity is replaced by a more continuous style. At the heart of this departure is an aspect of lantern grammar that dominates Life Model tableau

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[56] Émile Zola, "Naturalism on the Stage" (1881), in *Playwrights on Playwriting: from Ibsen to Ionesco*, ed. Toby Cole (New York: Hill and Wang, 1960), 6.

[57] Zola, "Naturalism on the Stage," 14.

[58] "'Miss Julia' in Paris," *New York Times*, February 3, 1893 (italics mine).

[59] Meisel, *Realizations*, 434.

narratives: an off-screen mode of representation, or the *lantern off-screen*. By calling this mode the lantern off-screen, I mean to evoke a temporal as well as spatial dimension. Nöel Burch has described six zones of diegetic filmic off-screen space: the space beyond the four edges of the frame, the zone behind the camera, and the area behind the set.[60] More recently, Daniel Morgan has explored off-screen time in film in terms of the various cuts in time.[61] While off-screen space and off-screen time are distinct aspects of film grammar, they blend into a spatio-temporal phenomenon in the aesthetic medium of the lantern and are activated by the image, not the frame. In the off-screen mode, Life Model tableaux perform off-screen space and time by portraying temporally and spatially ambiguous situations. While this mode is an aspect of all lantern images, it is the dominant feature of Life Model tableaux, which comprise the scenes and the narratives of Life Model melodramas like *Enoch Arden*.

The Life Model style employs the lantern off-screen on the level of both the image and the series. So, in *Enoch Arden*, an image like TWHBMHSHS, portraying the back of a man at the window, activates the off-screen space of Philip's hearth and all of Tennyson's details within it—the silver, the baby, the happiness—and the off-screen time before and after Enoch spies on Annie and his family. On the level of the series, the narrative is linearized across and between the images through its treatment of the settings. Whereas in the serially discontinuous style of classic tableau lantern narratives, each tableau represents one scene in one setting; in the Life Model style, as York's *Enoch Arden* series shows, settings are often repeated from scene to

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[60] Nöel Burch, *Theory of Film Practice* (Princeton: Princeton University Press, 1981), 17–31.

[61] Dan Morgan, "Off-Screen Time: Cinematic Temporalities and Medium Specificity" (lecture, the University of Chicago, September 30, 2013).

scene or returned to later in the narrative. This approach allows *Enoch Arden* to establish both a greater sense of continuity and a more coherent story world.

The settings of the tableaux in *Enoch Arden* range from “exteriors” of the village, the interior of Enoch and Annie’s home, China, at sea, and the desert island where Enoch and his fellow sailors are lost. The tableaux are: 1.) A long street climbs to one tall-tower’d mill; 2.) Three children of three houses; 3.) Enoch and Annie, sitting hand in hand; 4.) The rosy idol of her solitudes; 5.) Enoch parted with his old sea-friend; 6.) Enoch cast his arms about his drooping wife; 7.) The mother cared for it with all a mother’s care; 8.) He set himself beside her; 9.) It is beyond all hope, against all chance; 10.) Suddenly set it wide to find a sign; 11.) Her Enoch sitting under a palm-tree; 12.) Enoch bought quaint monsters; 13.) The loss of all but Enoch and two others; 14.) So the three dwelt with eternal summer; 15.) A ship-wrecked sailor waiting for a sail; 16.) A bill of sale gleam’d thro’ the drizzle; 17.) But Miriam Lane was good and garrulous; 18.) That which he better might have shunn’d he saw; 19.) Woman, I have a secret; 20.) And so fell back and spoke no more

Figure 2.7. York & Son's *Enoch Arden* (1890)

The first five tableaux, set in a seaside village one hundred years ago (in the mid-eighteenth century) show the three protagonists, Enoch, Annie, and Philip in five different spaces and times. The first, representing a sketch of the village, poses the three children in front of a painted backdrop depicting the landscape of the village and its distinctive windmill. The second tableau shows the three children playing in the sand near the cave where the two boys take turns "keeping house" with Annie. The transition between the second and third tableaux represents the transition from childhood to young adulthood and to the hollows of the wood, where Enoch and Annie profess their love, spied on by Philip. The transition between the third and fourth tableaux represents seven happy years during which Enoch and Annie wed and have a daughter and two sons, the second sickly. The fourth tableau shows Annie and the children sitting in the house while Enoch is working in the larger haven north of the village. In the fifth tableau, Enoch, having been offered the position of boatswain on a China-bound vessel, is selling his boat to provide for his family.

Four of the next five scenes are set in the same interior of Annie and Enoch's house, while the fifth returns to the hollows of the wood. The sixth tableau, showing the family in an embrace, represents the long scene in which Enoch bids his family farewell. In the transition between the sixth and seventh tableau, the space is consistent, and time between them is brief, perhaps a fortnight: as Enoch and two children slowly disappear, Annie moves to the chair and tends to her dying baby. A week elapses between the seventh and eighth scene, still set in the interior of Enoch and Annie's house. In the transition between images, Annie sits up, and the baby is replaced by Philip, who offers to "put the boy and girl to school." In the ninth tableau, we return to the setting near the hollow of the woods, where Enoch wooed Annie some years ago. Now, Philip and Annie sit together, and as Tennyson informs us, Philip implores Annie to

recognize that Enoch is gone, and to marry him. Annie agrees to give her answer in a year. In scene ten, a year has passed, and Annie, in the "bedroom" of her house—the same backdrop as the previous images, with part of a bed and a small table replacing the chairs—praying for a sign, ("My Enoch, is he gone?") places her finger on a page of the Bible.

And as she finds her finger on the line "under a palm tree" and thinks Enoch is in heaven, the image dissolves to scene eleven, showing the same bed and table, with Enoch sitting on the floor in front of a desert island backdrop. Here, the transition between scenes is radically different from that of the "vision scene" in Mathison's stage adaptation of *Enoch Arden*, in which the flats at the back of the stage were drawn, disclosing a stage picture of Enoch sitting under a palm tree.[62] It also differs from that of the Newton Beers production of 1889, which represented it as a transformation, in which Annie's cottage disappeared and was replaced by a tropical scene at night, which grew gradually brighter until Enoch is revealed in his island home.[63] In the lantern version, Annie and the backdrop of the home gradually fade out, Enoch and the backdrop of the palms slowly fade in, and the bed and table remain. Annie and Enoch thus merge as the transformation unfolds in her bedroom.

Scene twelve, motivated by the narrator's question, "And where was Enoch?," transitions to Enoch standing in a shop in China. Like the poem, which does not alternate between Enoch and Annie, as Gunning notes, but "picks up Enoch's story" at this point, the image dissolves into a scene of Enoch and two sailors, their ship destroyed by a storm on the way home and held up

[62] A. Nicholas Vardac, *Stage to Screen: Theatrical Method from Garrick to Griffith* (Cambridge, MA" Harvard University Press, 1949), 70.

[63] Vardac, *Stage to Screen*, 72.

by a piece of rigging and drifting in the ocean.[64] In the dissolve to the fourteenth tableaux, the men are transported overnight to a desert island, where Enoch ministers to the younger sailor for three years. As the image transitions to the fifteenth tableau, also in the desert island setting, the two men disappear, the second having since died of sun stroke, and Enoch waits, year after year, until a ship appears. The transition between the fifteenth and sixteenth tableaux represents Enoch's time on the long, dull voyage to England.

The final five tableaux are set in the village. In scene sixteen, Enoch returns to his and Annie's home to find it empty, with a for sale sign placed in the window. Enoch walks to a tavern in the wharf, where in scene seventeen, he sits with the innkeeper, Miriam Lane (who does not recognize him) and recounts the sad story of his house and family. One night, yearning to see Annie again, Enoch walks to Philip's house, where in scene eighteen, he sees his happy family by the hearth and vows not to reveal his identity. The final two scenes take place in the same interior setting, Enoch's room at the inn. In scene nineteen, Miriam Lane stands beside Enoch as he lies dying in the bed, and he tells her his secret. As the two compositionally identical tableaux dissolve, Miriam fades away and Enoch lies back on the bed. And as this final tableau of Enoch on his deathbed fades to black, it represents the off-screen time/space of his departure and burial: "So passed the strong heroic soul away. And when they buried him the little port had seldom seen a costlier funeral."

Enoch Arden incorporates several different modes of representation across the tableaux scenes and the transitions between them. The first is akin to the aforementioned "passion" mode tableau style described by Burch and Gunning, in which a series of discrete images are linked by

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64 Tom Gunning, D. W. Griffith and the Origin of the American Narrative: The Early Years at Biograph (Urbana, IL: Illinois University Press, 1994), 112.

a familiar narrative. Gunning considers this form of multi-shot tableau narrative in early film to "maintain a sort of sluggish continuity, rather than emphasizing the disruptions between shots," and the effect is similar across Life Model images.[65] Another mode mentioned above is that of repeated settings across several registering tableaux, as in the sequence in Annie and Enoch's home, which establishes continuity between scenes in the manner of dissolving view effects slides. This mode can represent rather long passages of time—a span of seven years in the case of *Enoch Arden*. Then there is the mode of the vision, in which two scenes are blended to represent mental imagery, such as Annie's sign of Enoch, or a dream, memory, or fantasy. Finally, there is the representation of an action across two continuous settings. In the death scene of *Enoch Arden*, for instance, the dissolve between images represents Enoch gradually expiring on the bed.

Thus the life model series, *Enoch Arden* narrates the story of the eponymous hero from his childhood, to his marriage to Annie, his disappearance at sea, his discovery upon his return that Annie is married happily to his rival, Phillip, and his death of a broken heart through a sophisticated and varied system of twenty tableaux and transitions. In doing so, it shows how the Life Model tableau style hovers between the classical style and a more linearized approach to lantern narrative. In this regard, it is comparable to early cinema's tableau style, which for Gunning functions "as a sort of transition" between the non-continuous style, in which discontinuous shots emphasize discontinuities on the level of the story, and the "narrative of continuity," which is akin to the form of the chase film.[66]

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[65] Gunning, "Non-Continuity," 107.

[66] Gunning , "Non-Continuity," 107.

The multiple modes of representation in *Enoch Arden* that contribute to its transitional nature or ambivalence reflect both the superposition of practices associated with the earlier classical tableau style and the ongoing reciprocity between the lantern and the theatre, whose new standards of realism were beginning to resonate on stage and beyond. They also demonstrate that lantern specificity is an always already hybrid and relative condition. For both classical and Life Model tableaux are historically and case specific, depending on ever-shifting relations between media forms, their users, and audiences. At the end of the day, *Enoch Arden* implores us to take a closer look because, as Tennyson reminds us, "things seen are mightier than things heard."

Coda: Excelsior! Or Ever Upward

Bamforth's *Excelsior!* (1899) is a Life Model narrative that shows a continuity of action over a series of images and dissolves. The series realizes the poem by Henry Wadsworth Longfellow, which describes the journey of a young man carrying a banner "Excelsior" to the summit of an alpine mountain. Along the way, the traveler ignores the warnings of an old man, rejects an offer of rest from a young maiden, and continues climbing through the night. At daybreak, a distant cry, "Excelsior!" is heard by the monks of Saint Bernard, who find the youth lifeless and buried in the snow, still clasping the banner.

Although intended to compel its readers to aim "still higher, ever upward," the poem has been burlesqued and parodied as much as it has been adapted. (What kind of nut runs straight up the side of a mountain on a dark and stormy night, while carrying a banner with the "strange device"?) But however we choose to interpret it, Bamforth's series presents the youth's trajectory up to the snowy summit as a continuous sequence—the commencement, continuation, and completion of a single action—across eleven images: three portraying the youth on the trail,

three in which he is passing through a village, one of the monastery in the mountains, one of the youth climbing, and two of him lying in the snow at the summit (where he is discovered by monks and a Saint Bernard dog). A final apotheosis image, in which the device "Excelsior" is displayed in the heavens, completes the youth's journey.

Figure 2.8.– Bamforth's *Excellsior!* (1899)

Chapter 3

The Dramaturgy of Color and Light

The Old Testament "Rainbow" was a picture on the sky—the first Lantern slide.
—C. H. Woolston[1]

There is something in human nature that responds to the geniality of light, and in many instances, people may be attracted to a particular theatre by sheer force of brilliant illumination.
—Robert Grau[2]

Act III opens *in medias res*, with a glimpse into the everyday life of Brünnhilde's sisters, riding through the air as they bring slain heroes from the battlefield to Valhalla. When Richard Wagner's *Die Walküre* premiered as a standalone opera in Munich in 1870, the Ride of the Valkyries was represented by stable hand doubles riding prancing horses on a carpeted stage. But for the 1876 premiere at his new Bayreuth Festival Theatre, where it was presented as the second music drama in his tetralogy, *Der Ring des Nibelungen* (the Ring cycle), Wagner wanted to realize the scene technologically, by magic lantern projection. So, Carl Emil Döpler, the costume designer, painted five lantern slides depicting the warrior maidens and their horses, which were thrown onto the stage in the manner of dissolving views. Similarly, at the Munich premiere of *Das Rheingold* in 1869, the magical Rainbow Bridge, which the gods cross to return to Valhalla, was a tangibly physical construction. But for the Bayreuth premiere, Wagner demanded an optical effect that could also be traversed by the singers. So, Hugo Bähr, the renowned stage lighting and effects designer, devised a lantern outfitted with a prism attachment

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[1] C. H. Woolston, "A Lanternist's Creed," *Optical Magic Lantern Journal 11*, no. 128 (January 1900): 2.

[2] Robert Grau, *The Stage in the Twentieth Century* (New York: Broadway Publishing Co., 1912), 346.

that could project a rainbow onto the bridge.[3] While these effects were not wholly successful—one critic wrote that the Rainbow Bridge resembled "a seven-colored liverwurst"—they represent an exciting, experimental, and ultimately mutually beneficial collaboration between the lantern and electric light.[4]

Although generally unknown today, or buried in histories of stage lighting and effects, the lantern's long history of use in the theatre begins decades before Bayreuth. Its first documented appearance was in 1819, when it played the Earth Spirit "in the phantasmagorical manner" in a private production of Goethe's *Faust* at the Monbijou Palace in Berlin.[5] In 1820, it created a vivid storm in Edmund Kean's production of *King Lear* at the Drury Lane Theatre in London. As the comedian Joe Cowell, who attended the opening night, recalled:

> Over head were revolving prismatic coloured transparencies, to emit a continually changing supernatural tint, and to add to the unearthly character of the scene. King Lear would appear at one instant a beautiful pea-green, and the next sky-blue, and, in the event of a momentary cessation of the rotary motion of the magic lantern, his head would be purple and his legs Dutch-pink.[6]

Then, in 1827, Edward Fitzball enlisted Henry Landgon Childe to create a role for the lantern in his production of *The Flying Dutchman* at the Adelphi Theatre, London:

> *Storm.—A mist begins to arise, through which Venderdecken is seen crossing the sea in an open boat with Lestelle, from L. U. E.—the storm rages violently—the boat is dashed above the waves—it sinks suddenly with Vanderdecken and Lestelle—the PHANTOM SHIP appears (a la phantasmagoria) in a peal of*

[3] Hermann Hecht, *Pre-Cinema History: An Encyclopedia and Annotated Bibliography of the Moving Image Before 1896*, ed. Ann Hecht (London: Bowker Saur, 1993), 220.

[4] Eduard Hanslick, "Richard Wagner's Ring of the Nibelung at the Vienna Hofoper" (1879) in *Richard Wagner and His World*, ed. Thomas S. Grey (Princeton: Princeton University Press, 2009), 414.

[5] Frederick Burwick, *Illusion and Drama: Critical Theory of the Enlightenment and Romantic Era* (University Park, PA: Pennsylvania State University Press, 1991), 241.

[6] Quoted in Richard D. Altick, *The Shows of London* (Cambridge, MA: Harvard University Press, 1978), 214.

thunder.—The stage and audience part of the Theatre in total darkness.[7]

In Fitzball's *Azael, the Prodigal* (Drury Lane, 1851), the lantern represented three angels that appeared in rapid succession, the third of which stretched its wings, pointed out the way to Azel and flew away, indicating the use of mechanical slides as well as phantasmagoria and dissolving view techniques. The lantern produced a number of visions in Samuel Phelps's production of *A Midsummer Night's Dream* (Sadler's Wells, 1853), a scene change in Francis Talfourd's *Electra in a New Ligh*t (Haymarket, 1859), and an enchanted wood in Fred Conquest's pantomime, *Nix, the Demon Dwarf* (Grecian, 1872).[8]

Thus the lantern's repertoire of techniques and roles—from natural phenomena to apparitions to visions—was well established by the time it appeared at Bayreuth in 1876. Its reciprocal interchanges with the medium of electric light, however, were both new and renewing. In the decades that followed, the lantern's expressive and mimetic capacity were significantly expanded by these interactions, and its use in the theatre became increasingly widespread. Indeed, Bähr's apparatus, developed at Bayreuth and subsequently manufactured in Dresden, was acquired by some 500 theatres worldwide, including the Chicago Auditorium, where it was used during the 1890 opera season to represent the sky, sea, storms, waves on the water, dreams and visions, and even the circle of fire, drawn with a sword by Mephistopheles in a production of Gounod's *Faust*. "All of these," noted *Western Electrician*, "can be brilliantly produced by the

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[7] Edward Fitzball, *The Flying Dutchman, or, the Phantom Ship: A Nautical Drama, in Three Acts* (London: G. H. Davidson, n.d.), 39.

[8] Terence Rees, *Theatre Lighting in the Age of Gas* (London: Society for Theatre Research, 1978), 89. Henry Landgdon Childe designed the projections for both of Fitzball's productions.

… electric light and stereopticon, which is nothing more or less than an improved magic lantern."[9]

This chapter explores the lantern's dynamics of superposition and reciprocity by way of an excavation and examination of *A Trip to the Moon* (1892), an elaborate astronomical performance at Carnegie Music Hall depicting an imagined journey to the moon and back. In *A Trip to the Moon,* a sophisticated ensemble of established and emergent technology realized a series of moving pictures of terrestrial and celestial phenomena that were grounded in scientific accuracy, unfolded temporally, and represented the lunar situation in unprecedented ways. By elaborating *A Trip to the Moon*'s modes of representation and address, I show how the lantern harnessed electric light to mobilize new viewing positions and epistemes at the dawn of the twentieth century. As a result of this new mimetic power, the lantern was launched into a range of new sites of exhibition, where it began to break down the division between screen images and spectatorial space. *A Trip to the Moon* thus sheds new light on old/new media relations within the longer tradition of multimedia, while suggesting some of its possible futures.

Wonders of the Heavens

In the spring of 2016, the New York-based nonprofit arts organization, Creative Time, presented *Fly By Night*, a performance by 2,000 illuminated pigeons orchestrated by artist Duke Riley in the Brooklyn Navy Yard. Riley's grand-scale public artwork, a tribute to pigeons (rock doves), their keepers (fanciers), and their intertwining histories at Cob Dock (a non-extant artificial island that housed the US Navy's largest messenger-pigeon fleet), aimed to emulate thousands of shooting stars above the East River by unleashing the birds over Wallabout Bay at dusk. As

[9] "Electric Effects at the Chicago Auditorium," *Western Electrician* 6, no. 16 (April 19, 1890): 221.

audiences settled into the bleacher seating at the water's edge of this neo-Gilded metropolis and the pigeons took their places on the upper deck of the Baylander (a Vietnam-era US Naval ship), some attendees were, predictably, skeptical. After all, public artworks dependent on the cooperation of nature could be, as *New York Times* critic Roberta Smith put it, "more fun to read about than to observe."[10] But just before nautical twilight, 2,000 LED avian legbands went on simultaneously, Riley and his assistants began whooping and waving long makeshift flags, and everyone beheld a marvel: straightaway the pigeons were airborne, first swirling overhead en masse, next breaking into smaller clusters above the East River, then creating a visual symphony as they harmonized with the emerging stars. At the end of astronomical twilight, bells and whistles signaled the flock to return to the stage for a curtain call before the audience, whose skepticism had given way to wonderment. For Smith, *Fly By Night* was "a revelation" that "brought a sharper appreciation of space and air as active or sheltering forces that we share with all living things."[11] For another critic, the performance "evoked a series of alternate universes…. What if constellations moved really fast? What if fireworks could change direction at will? What if the lights of the New York skyline suddenly took to the air?"[12] Through a combination of electroluminescence, pigeons, and artistry, *Fly By Night* had enacted the stars.

Time travel to another moment in New York entertainment history, 125 years earlier: spring 1892—the "Columbus year." Gilded Age New York was already a self-consciously powerful and wealthy globalist city, intent on advancing international trade, technology, and the

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[10] Roberta Smith, "Illuminating the Bond between Artist and Bird," *New York Times*, May 9, 2016.

[11] Smith, "Illuminating the Bond between Artist and Bird."

[12] Andy Newman, "When Art Hitches a Ride on Pigeons," *New York Times*, April 28, 2016.

arts. In its fifty theatres, twenty halls, and other venues, the city offered "amusements numerous and varied enough to suit all tastes and all purses … from the Metropolitan Opera House to the low concert-saloons of the Bowery."[13] Like the present time, audiences had, in a sense, seen it all when the great philanthropist Andrew Carnegie presented an unusual astronomical performance in his new Music Hall: *A Trip to the Moon*. Featuring the well-known writer, astronomer, and lecturer, Garrett P. Serviss, *A Trip to the Moon* aimed to enlighten audiences about an aspect of the natural world regularly seen but not fully appreciated. And given Serviss's recognized talent for expounding astronomical facts and theories in an entertaining style, audiences likely expected to be edified about the lunar world. But as soon as they experienced the first of many imposingly realistic scenes of celestial phenomena—the gradual unfolding of a solar eclipse over the rippling waters of a lake at sunrise, achieved with magic lanterns, transparent painted scenery, and electric stage lighting—their cynicism yielded to wonder.

Figure 3.1. *A Trip to the Moon*, "Scene 1: An Eclipse of the Sun" and production.
Detail from cover of *Scientific American*, 9 April 1892.

[13] Moses King, *King's Handbook of New York City: An Outline History and Description of the American Metropolis* (Boston: Moses King, 1893), 65.

As the *Brooklyn Daily Eagle*'s critic described, "A point of fiery red that rose from beyond the horizon, slowly and majestically growing larger and larger, until revealed as a bloody crescent, was the sun …. Then, as the moon totally obscured the orb of day, the corona burst forth in startling brilliancy. For a moment, the audience sat spellbound and then burst into hearty applause."[14] The ensuing succession of scenes of an earthrise, a sunrise, and a solar eclipse viewed from the moon received as many plaudits. "No operatic performances in America nor Europe," wrote a critic for the *New York Evening Post*, "not even at Bayreuth, have ever had the benefit of such brilliant and thoroughly artistic scenic effects as these."[15] Through a combination of incandescence, magic lanterns, and stagecraft, *A Trip to the Moon* had enacted the moon.

The juxtaposition of these two performances touches on an aesthetic of wonder in astronomical performances and the ways it began to transform audience experiences at the end of the nineteenth century. While *wonder,* as both object and passion, had a long and variable history from the Middle Ages to the Enlightenment, as Lorraine Daston and Katharine Park have shown,[16] my own use of the term, following Philip Fisher, refers to an aesthetic experience—a sudden reaction of delight that excites intellectual curiosity and sets reflection in motion.[17]

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[14] *Brooklyn Daily Eagle*, March 6., 1892.

[15] "Music and Drama," *New York Evening Post*, April 14, 1892.

[16] See Lorraine Daston and Katharine Park, *Wonders and the Orders of Nature, 1150–1750* (New York: Zone Books, 1998). In their account, wonder lost much of its charge during the Enlightenment, when wonders became explainable by science. So the longhaired star that wandered the night sky on irregular circuits, believed for millennia to be a prodigy—and often a portent of famine, war, or plague—was neutralized in 1705 when Edmond Halley recognized it as a periodic comet. Cf. Richard Holmes, *The Age of Wonder: How the Romantic Generation Discovered the Beauty and Terror of Science* (New York: Pantheon Books, 2008), which extends wonder, as the motor for scientific exploration, into an era of "Romantic wonder" that concludes at the cusp of modern science with Darwin's departure aboard the Beagle in 1831.

[17] See Philip Fisher, *Wonder, the Rainbow and the Aesthetics of Rare Experiences*. In contrast to Daston and Park, Fisher argues that wonder and explanation are not oppositional, and that genuine wonder is an

According to Fisher, both the sublime and wonder are based on surprising visual experiences, but the former mixes them with fear, power, and danger while the latter blends them with pleasure, curiosity, and exploration. Where aesthetic encounters with the sublime stir up feelings of limitation in the face of the infinite, those with wonder evoke the possibility of knowledge. In the sciences, wonder colors thought from encounter to explanation. In architecture, in painting, in music, and other art forms, it extends boundaries by harnessing new materials and fresh techniques; as such, it is a key characteristic of modernization and modernity.

At the end of the nineteenth century, astronomical lantern performance underwent an aesthetic shift. Throughout most of the century, astronomy was widely known as "the sublime science"; likewise, as an examination of lecture texts and ephemera readily shows, popular astronomical lecture-demonstrations aestheticized the sublime as they informed about the cosmos. The cosmos itself was held to be the work of the Supreme Being, and astronomical exhibitions such as the Walkers' Grand Transparent Orrery, the Eidouranion (1782–1842), a fixture of London's Lenten season, employed a blend of religious oratory, science, and spectacle to "elucidate the sublime Science of Astronomy, on a Scale commensurate to its Importance, to imitate, though humbly, the glorious Phenomena of Creation."[18] Astronomical entertainments in New York, whether given by original investigators or showmen, made similar appeals to reverence. In December 1847, American astronomer Ormsby M. Mitchell, in his "Course of Lectures on the sublime Science" at the Broadway Tabernacle, described the natural laws of the

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endlessly renewable "process by which pleasure induces, converts into, and then sustains investigation" (31).

[18] Henry C. King, *Geared to the Stars: The Evolution of Planeteriums, Orreries, and Astronomical Clocks* (Toronto: University of Toronto Press, 1978), 312.

universe as “the Expression of God’s Will,”[19] while during the same era generalist Charles Came, in his peripatetic shows in Upstate New York, employed more hyperbole and biblical rhetoric in his “Lecture! On the Beautiful and Sublime Science of Astronomy.”[20]

The appeal to the sublime in popular astronomy lectures started to erode with the introduction of photographic astronomy slides of eclipses, transits, and stellar spectra made available by the dry plate process in the mid-1870s. English astronomer Richard A. Proctor’s celebrated lectures at Steinway Hall, for instance, though at times wildly speculative and occasionally invoking the Almighty, were “profusely illustrated with spectroscopic views,” and recent photographic views of the moon, which he showed to evidence its lifeless condition.[21] At the beginning of the 1880s, global advances in electric light and astrophotography and local contributions by Thomas Edison and Henry Draper opened up a space for experiences of wonder in astronomical performance—a space in which wonder, liberated from the sublime, could make a strong appeal to spectators’ sense and sensibility.

If, as I am suggesting, astrophotography and electric light were catalysts for this aesthetic shift in astronomical performance, the shift itself took place within a historical *dispositif*—an arrangement of image, technology, lecturer, and audience—that remained relatively stable

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[19] O. M. Mitchell, *A Course of Six Lectures on Astronomy, Delivered in the City of New York* (New York: Greeley & McElreath, 1848), 11.

[20] See Fred Nadis, *Wonder Shows: Performing Science, Magic and Religion in America* (New Brunswick, N.J.: Rutgers University Press, 2005): 38–39. Nadis’s history begins where Daston and Park’s ends, in the late eighteenth century, when wonders became vulgarized. Came’s popular entertainments included phrenological readings, electrical healings, and mesmeric demonstrations that promoted pseudo-science as much as they did science. As such, they reflect the contradictions of nineteenth-century wonder shows, which awed and astonished the public with staged demonstrations of science and technology.

[21] Richard A. Proctor, *Six Lectures on Astronomy* (New York: Truth Seeker, n.d.), http://books.google.com/books?id=a007AQAAIAAJ, 5 and 23.

throughout the nineteenth century.[22] As I have argued elsewhere, several formal features combined to *perform* (versus illustrate or display) the night sky: an eloquent lecture, projected and moving astronomical images, and a darkened hall.[23] Eloquent science lectures, like the great popular lectures of Faraday, Agassiz, and Huxley, appealed to the imagination by linking scientific fact with human experience. In the case of astronomy lectures, this appeal often included adopting the narrative of a journey through the solar system. Apart from the addition of new discoveries, such as the Great Comet (1811) and Neptune (1846), the imagery—what we might now consider scientific visualizations—did not vary much from the earliest transparent orrerys (the Eidouranion and its spin-offs), to the projected orrerys that emerged in the 1820s, to the innumerable lectures with Carpenter and Westley's movable astronomical diagrams (rackwork slides, perfected in the 1840s, and still offered by Newton and Co. in 1920). Animated astronomical lantern slides were wondrous in their mechanical effects and precociously modern in their ability to model planetary time, motion, and scale on screen—so much so that they were able to satisfy the varying tastes of Enlightenment, Romantic, and Victorian audiences and to remain in use alongside astrophotographic slides toward the end of the century. With their colorful transparent satellites, surrounded by lamp black, illuminated in projection, and suspended in what Noam Elcott terms a "dispositif of artificial darkness," they transformed the

[22]Frank Kessler, "The Cinema of Attractions as Dispositif," *The Cinema of Attractions Reloaded*, ed. Wanda Strauven (Amsterdam: Amsterdam University Press, 2006), 57–69.

[23] See Artemis Willis, "Performing the Night Sky: Heavenly Bodies, Microcosms and the Moving Image" in *Objectivity and the Effects of Truth: Early Cinema and the Realist Tradition,* ed. Àngel Quintana and Jordi Pons (Girona" Fundació Mueseu del Cinema-Col.lectió Tomàs Mallol & Ajuntament de Girona, 2015), 109–20. See also Altick, *The Shows of London*, 364; King, *Geared to the Stars*, 309–21; Mark Butterworth, "Astronomical Lantern Slides," *The Magic Lantern Gazette*, no. 19 (2007): 3-13; and Jeremy Brooker, *The Temple of Minerva: Magic and the Magic Lantern at the Royal Polytechnic Institution, London 1837-1901* (London: The Magic Lantern Society, 2013), 21–25.

ordinary lantern situation into a media environment that suggested the heavens.[24] When these features aligned, astronomical performances were able to evoke the human condition vis-à-vis the vastness of the cosmos, and to position spectators in a vaguely off-world relation to it.

Figure 3.2. Terri Kapsalis (Theater Oobleck) in *The Night Sky* (Artemis Willis, 2014)

To return to *A Trip to the Moon*, a close examination of the astronomical entertainment suggests that it is a stylistic outlier in this constellation. The performance positioned spectators in specific locations on Earth, in space, and on the moon, and its mode of representation was distinctly different and far more elaborate. The lecture not only integrated up-to-date scientific fact with imagined lunar travel; it also conveyed the astronomical spirit—the work of astronomers and astronomy. The images were not single lantern projections, but fully mounted theatrical scenes, performed by an unprecedentedly large ensemble: multiple magic lanterns;

[24] Noam Milgrom Elcott, *Artifcial Darkness* (Chicago: University of Chicago Press, 2016), 78.

mechanical effects slides; painted drops and scrims; arc, foot, and border lights; colored gels; rheostats; and various stage machinery. The eclipses were not animated diagrams, but wholly staged moving pictures of solar eclipses viewed from the moon's surface—measured, calculated, and rendered with fidelity to the scientific phenomena they represented. State-of-the-art stereopticon views, such as Isaac Robert's then-current astrophotograph of the Andromeda Nebula, were interspersed with the mounted scenes to furnish a continuous nonfiction *Gesamtkunstwerk*. Thus, both image and word were inscribed with science and wonder, giving audiences an unprecedented sense of, as indicated by the title of a *New York Times* review (from which this chapter borrows its title), "What the Moon is Like."

Much like motion pictures that emerged three years later, *A Trip to the Moon* can be considered at once a continuity, a culmination, and a rupture. Given that it was presented according to the basic arrangement of a lecture, luminous celestial phenomena, and an artificially darkened hall, it was a continuation of earlier nineteenth-century astronomical entertainments. However, it can be also be thought of as the apex of them in that it incorporated a wide range of other traditions, such as theatrical scene painting, stage lighting, and stage machinery. Moreover, its effects were indebted to a variety of earlier light-dependent forms, including back-projected (phantasmagoria) lantern shows, Ombres Chinoises, painted transparencies, the Diorama, and moving panoramas. In fact, in terms of the amalgamation and synthesis of multiple forms and practices, *A Trip to the Moon* was most closely related to de Loutherbourg's Eidophusikon (1781). Yet *A Trip to the Moon* stands apart from all of the above in one crucial respect, suggesting a discontinuity. It was realized by the new medium of electric light: a medium that originated in the theatre, emerged in the US between 1885 and 1915,[25] and was, according to

[25] David E. Nye, *Electrifying America: Social Meanings of a New Technology, 1880-1940* (Cambridge:

Carolyn Marvin, a "new communications technology" that contributed "a vocabulary of popular forms in mass entertainment spectacles" and "the reorganization of traditional audiences" to the mass media of the twentieth century.[26]

However we choose to characterize *A Trip to the* Moon, the show capitalized on the new medium of electric light to achieve old and new effects in stage lighting, establish new purposes for the old lantern, and expand the lantern's repertoire in the twentieth century. My interest centers on this phenomenon and the questions it raises about how we continue to rewrite cinema and media history. Does the lantern's extended range revise our thinking about its place within cinema's pattern of ongoing transformation, perhaps as a kindred form that, as Yuri Tsivian has argued, is "not a fixed object, but … a multiple, nonunifiable object … and a multiple, nonunifiable process"?[27] If, as Tom Gunning has shown in the context of Méliès's *A Trip to the Moon*, "modern vision is mediated vision," did the 1892 astronomical performance exemplify a modern viewpoint by other means?[28] Since, as Gunning and Miriam Hansen have noted, the myriad practices surrounding the emergence of motion pictures point to "roads not taken," can they sometimes gesture elsewhere, to roads *not yet taken*?[29] And what do LED-lit pigeons have to do with a novel entertainment about the moon?

MIT Press, 1990), 29.

[26] Carolyn Marvin, *When Old Technologies Were New: Thinking about Electric Communication the Late Nineteenth Century* (New York: Oxford University Press, 1988), 8.

[27] Yuri Tsivian, "'What is Cinema?' an Agnostic Answer," *Critical Inquiry* 34, no. 4 (2008): 775.

[28] Tom Gunning, "Shooting into Outer Space: Reframing Modern Vision," in *Fantastic Voyages of the Cinematic Imagination: Georges Méliès's* Trip to the Moon, ed. Matthew Solomon (Albany: State University of New York Press, 2011), 98.

[29] Tom Gunning, "An Unseen Energy Swallows Space: The Space in Early Film and its Relation to American Avant-Garde Film," in *Film Before Griffith*, ed. John L. Fell (Berkeley: University of California Press, 1983), 366; Miriam Hansen, "Early Cinema, Late Cinema: Permutations of the Public

One could argue that *A Trip to the Moon* is probably not as noteworthy as its enthusiastic press reviews suggest. To be sure, the popular press heaped praise on the entertainment during its run, but specialized publications for theatre, science, and electrical engineering did too. Moreover, toward the end of the decade, Albert A. Hopkins devoted a chapter of *Magic: Stage Illusions and Scientific Diversions* to the performance, and twenty-five years later, the English theatrical historian W. J. Lawrence identified it as a landmark—a "sundry sideshow" that provided "at last some inkling of the full possibilities of electrical stage-lighting" in America.[30] One could also argue that *A Trip to the Moon*'s innovations were merely a reorganization of long available techniques in a new electrical context. However, the show did not achieve its effects by hard-wiring established practices, but by harnessing electrical illumination and shaping it in a new kind of stage/screen presentation. *A Trip to the Moon* engaged its audience with a profoundly luminous address, doubling, in a sequence of stunning scenes, the marvels of lunar science with the marvels of stage science. Photons played photons, and in the process, as I will argue, American theatre was transformed, new viewing positions emerged, and the lantern, having reinvented itself, went on to flourish during the decades of its presumed obsolescence. By elaborating *A Trip to the Moon*, this chapter aims to show how the historical specificity of a stylistic anomaly can shed light on old/new media relations. In doing so, it also makes a case for the case study, not only as a contribution to the catalogue of rich pre-cinematic practices that

Sphere." *Screen* 34, no. 3 (1993): 210.

[30] W. J. Lawrence, "Solving Lighting Problems. How American Producers Came to Realize the Possibilities of Electricity in Gaining Effects," Th*e Dramatic Mirror*, March 3, 1917: 5.

influenced early cinema, but also as an event that upends the teleologies that often attend that very project.[31]

Flights of Fancy

Was *A Trip to the Moon* a trip to the moon? A common supposition about the performance is that it aimed to satisfy a powerful cultural fantasy of lunar flight, inspired by celebrity aeronaut Nadar's balloon adventures, ignited by Jules Verne's 1865 novel, *From the Earth to the Moon*, and fueled by Jacques Offenbach's 1875 *féerie* operetta, *Le Voyage dans la lune*. So, for instance, Lynda Nead suggests it offered "the fantasy of a space journey" that fed the "taste for popular commercial entertainment" of "the putative late Victorian follower of astronomy."[32] By her account, *A Trip to the Moon* took spectators to the moon via a sequence that progressed from a distance of five thousand miles to two-and-a-half miles above the moon before landing on its surface, then returned them to Earth where the "viewer's over-excited imagination … was finally calmed by a series of lantern views of local beauty spots."[33] Frank H. Winter claims *A Trip to the Moon* was "a bona fide space simulation" that was one baby step away from "the first large-scale simulated spaceflight rides for mass audiences," the "Trip to the Moon" attractions (1901–1905)

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[31] See Thomas Elsaesser, "The New Film History as Media Archaeology," *Cinémas* 14, nos. 2–3 (2004): 89. As Elsaesser points out, while the "*longue durée* accounts" of genealogical and cyclical models can complicate and enrich our understanding of the emergence of motion pictures, they also have a way of charting trajectories to "transitory" teleologies, wherein "selectively chosen predecessors can then be seen to lead up to just this point." Given that the lantern has a long history that predates the emergence of

cinema, and its post-1895 life remains underexamined, it is inevitably described in terms of ancestry or context, and thus placed on a path leading up to an implied goal.

[32] Lynda Nead, Th*e Haunted Gallery: Painting, Photography and Film around 1900* (New Haven: Yale University Press, 2007), 221.

[33] Nead, *The Haunted Gallery*, 223.

created by Thompson and Dundy for the Pan-American Exposition in Buffalo, NY, and Coney Island, NY.[34] In his discussion of the connections between Méliès's film, *A Trip to the Moon* (1902) and fairground amusements, Matthew Solomon contrasts the fixed theatre setting of Serviss's lecture with the immersive experience of Thompson and Dundy's ride, which not only "simulated space flight aboard the aerial ship" but also offered "movement through a series of real spaces."[35]

Considered from the perspectives of the Victorian astronomical imagination, the history of space flight, and Méliès's engagement with other forms of popular visual culture, *A Trip to the Moon* either partially fulfills a fantasy, doesn't quite simulate it, or fails to deliver an embodied experience of it. To some extent, these readings are based on mistakes: the Music Hall production showed scenes of the moon as it would be seen from 24,000 miles, not five thousand; it pictured Mts. Aristarchus and Herodotus from a lunar elevation between the *Mare Imbrium* and the *Oceanus Procellarum*, not as the spaceship's final approach; and it projected astral, not terrestrial photographic stereopticon views between the scenes, not at the end.[36]

[34] Frank H. Winter, "'The 'Trip to the Moon' and Other Early Space Flight Simulation Shows, Ca. 1901–1905," Part 1," in *History of Rocketry and Astronautics*, AAS History Series Vol. 23, ed. Donald C. Elder and Christophe Rothmund (San Diego, CA: American Astronautical Society, 2001), 135.

[35] Matthew Solomon, "A Trip to the Fair; or, Moon-walking in Space," in *Fantastic Voyages of the Cinematic Imagination: Georges Méliès's Trip to the Moon*, ed. Matthew Solomon (Albany: State University of New York Press, 2011),148–49.

[36] Nead and Winter's misreadings may in part be based on the *Scientific American* and the *New York Times* reviews, which both mention the incorrect figure of 5,000 miles—a distance that would fill the screen with only a portion of the moon's surface. In addition to Serviss's lecture script, the *Brooklyn Daily Eagle*'s November 16, 1892 review describes "a stop made within 24,000 miles of the moon" that provided audiences a good look at it. Nead and Fell also state that the show was produced in 1887; however, the earlier iteration of the show in Berlin, *From the Earth to the Moon,* could not have been created before July 1889, when the Urania Gesellschaft opened.

Figure 3.3. *A Trip to the Moon*, "Scene 3: Lunar Landscape in the Vicinity of Aristarchus and Herodotus." Detail from cover of *Scientific American*, April 9, 1892.

But they also reflect the limits of analyzing *A Trip to the Moon* within the context of fantasized space flight. While the performance sheds light on the cultural circulation of its title, the cultural circulation obscures the performance, miscasting it as a spectacle qua spectacle that stood between past *féeries* and future attractions. By situating the show within this genealogy—an interesting antecedent, as John L. Fell put it, "of the Méliès film of 1902"—these approaches deflate *A Trip to the Moon* to the flatness of a precursor while overlooking its scientific ambitions.[37]

A Trip to the Moon indeed employed the trope of lunar travel, but it did so as marketing and scaffolding for a scientific lecture that mediated up-to-date knowledge about the moon by

[37] John L. Fell, *Film and the Narrative Tradition* (Berkeley: University of California Press, 1986), 142.

the latest advances in stage science. Consider the “lunar flight” scene discussed above, “Scene 2: Within 24,000 Miles of the Moon.” The scene presented the moon, its prominent features and phases, and the dark starry universe surrounding it, as it would be seen at a distance of 24,000 miles. The representation was created with a plaster replica of the moon three meters in diameter, set behind a circular scrim framed in black drop curtain. Light thrown by lanterns reproduced the effects of not only sunlight but also earthlight— the ashen light from earthshine that, as Serviss explained, would be more brilliant than moonshine on the Earth and that illuminates the portion of the moon where the sun has not yet risen.

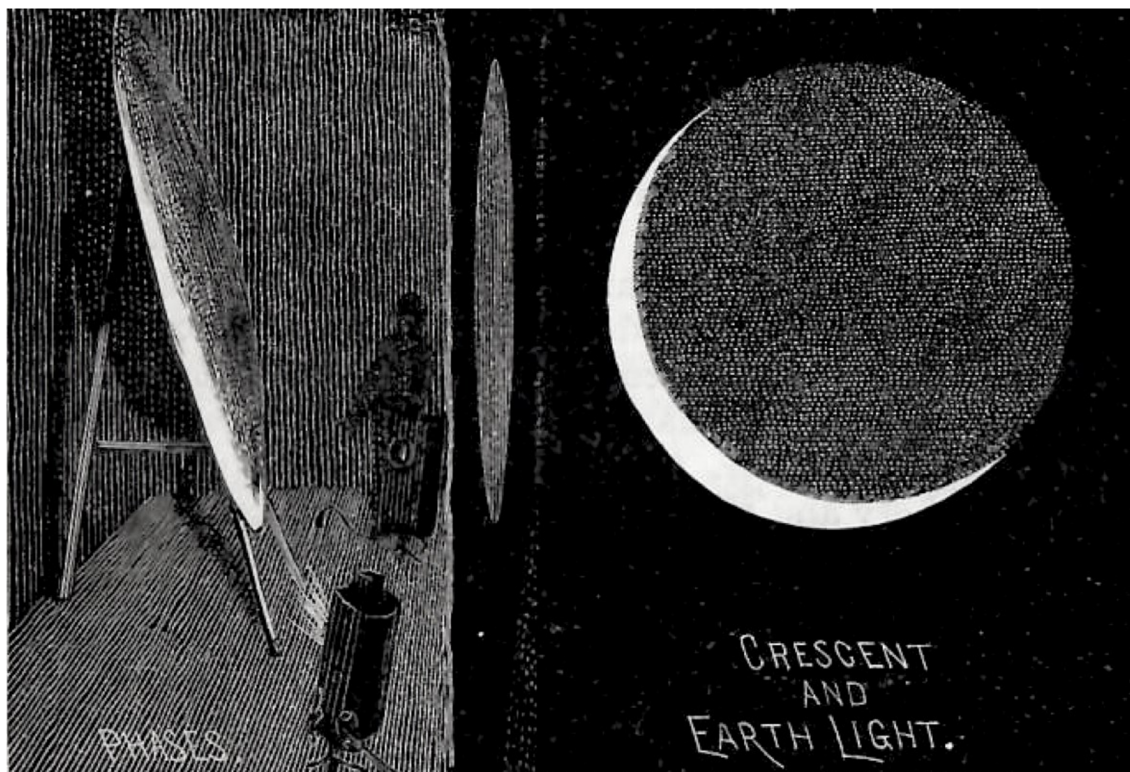

Figure 3.4. *A Trip to the Moon*, “Scene 2: Within 24,000 Miles of the Moon” and production. Detail from cover of *Scientific American*, April 9, 1892.

Serviss’s narration unfolded thus:

> If we could travel to the moon, as Hans Pfaall did in Poe’s story with the aid of a balloon,

> or borne by the wings of a flock of wild swans after the manner of Domingo Gonzales' lunar journey, or darting through space inside a hollow projectile according to Jules Verne's method, we should find many things to interest us along the way. When we arrived within about 24,000 miles of the moon's centre, or in other words, when about nine-tenths of our journey were completed, we should be at the neutral point between the attraction of the earth and that of the moon. There our weight would fall from us like magic, since the moon would draw us toward its surface with the same force with which the earth tended to pull us back. The consideration of such facts serves to vivify our conception of the manner in which gravitation binds the solar system together. We can express the amount of attractive force required to keep the moon travelling in an orbit around the earth by comparing it with the strength of steel, and we thus arrive at the somewhat startling statement that the attraction between the earth and the moon is equal to the tensile or pulling strength of a round bar of steel more than 330 miles thick! At the distance of 24,000 miles from the moon's centre we should be able, without any optical aid, to perceive the true character of its surface. Already the great crater, or ring mountains, which give so strange an appearance to the moon would be clearly discernible. The broad shadowy regions, which are called *mares* or seas, would appear sharply distinguished to the eye from the brighter parts of the moon which are the upland and mountain regions. We could then choose our point of landing upon its surface and continue our journey, being henceforth under the gravitative dominion of the moon.[38]

Here, Serviss's use of the first-person plural establishes a comfortable connection between audience and lecturer, while his use of the conditional expresses possibility and wonder. His reference to the familiar flights of fancy of Godwin, Poe, and Verne serves as an invitation to join him on a hypothetical journey to the moon—an experience not unlike going along with Carl Sagan or Neil deGrasse Tyson on the spaceship of the imagination today. His imaginary travel scenario sets up the narrative continuity of the show and launches a collective sense of discovery and curiosity about the "science." In this scene, the science is represented by the gravitational neutral point between the Earth and the Moon, the lunar topography discernable from a distance of 24,000 miles, and the balance between centripetal and centrifugal forces, calculated and expressed in terms of steel, that keep the Moon in orbit around the Earth. Serviss was keenly

[38] Garrett P. Serviss, *Wonders of the Lunar World, or a Trip to the Moon*. Urania Series No. 1 (New York: Morris Reno, 1892), 8.

aware of the tensions between word and image in illustrated lectures and strove to obtain artistic results by making the images serve his thought. "The problem," as he put it, "is to combine the appeal to the ear with the appeal to the eye in such a manner that neither shall lose, but both gain, by the combination."[39] Several aspects of his approach are apparent in this passage: it does not provide a redundant description of the scene (as in, "here, we have a view of the moon from 24,000 feet….") but complements it through counterpoint; it avoids the use of excessive statistics, grandiose sentiment, and overly big words; and it assumes the interest of an intelligent lay audience. Like Proctor, Serviss viewed the cosmos through the lens of the new astronomy that was informed by spectroscopy and photography, and in his writing and lecturing he sought to democratize it by propagating astronomical knowledge to the general public.[40] In striking a balance between spectacle and explanatory discourse, *A Trip to the Moon* made a joint appeal to the senses and the intellect that aimed to popularize astronomy for modern audiences.

Was *A Trip to the Moon* an early planetarium? The planetarium shows that emerged in the 1920s and 30s certainly shared the performance's pedagogical-astronomical aims. Planetariums, as both devices of wonder and instruments of the imagination, have a long history of demonstrating planetary motions with mechanical models or optical projection, and of uses that reflect a range of diverse cultural contexts and meanings. Their form, one might say, emerged in the later part of the seventeenth-century with Christiaan Huygens's design, following his invention of the magic lantern (1659) for his orrery-like planetarium, or "Automaton"

[39] Garrett P. Serviss, "Oratory not a Lost Art," *Brooklyn Daily Eagle*, September 25, 1898.

[40] Bernard Lightman, *Victorian Popularizers of Science* (Chicago, IL: University of Chicago Press 2007), 307.

(1682).[41] The orrery first took shape on the screen in the late eighteenth century with Adam Walker's Eidouranion performances and was more fully realized by the planetarium projectors installed in major cities around the world by the mid-1930s—a fusion, in a sense, of Huygens's two inventions. Indeed, with its star globes for northern and southern hemispheres, and additional solar, lunar, and planetary projectors arranged between them, the Zeiss universal planetarium was considered, according to Alison Griffiths, a "super magic lantern."[42] Moreover, as Griffiths notes, projection planetariums were also performative spaces where showmanship was "an intrinsic part of the planetarium experience, an inevitable outcome of the fusion of science and popular culture."[43] Thus, planetarium shows, earlier astronomy performances, and *A Trip to the Moon* negotiated similar tensions between science and spectacle.

However, while a diachronic consideration of astronomy entertainments that performed the night sky can elucidate their historical circulation through changing technological and social conditions, this cyclical model can't address the synchronic aspects of a given entertainment within it. *A Trip to the Moon* and planetarium shows were diverse in terms of how they made meaning and the knowledge and experiences they produced. Projection planetariums' *dispositif* simulated the embodied experience of stargazing. They were purpose-built apparatuses that imitated the night sky through the combination of a projection dome, a "projector"—a sphere studded by multiple optical projectors—and a darkened space that accommodated up to several

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[41] King, *Geared to the Stars*, 113.

[42] Alison Griffiths, *Shivers down Your Spine: Cinema, Museums, and the Immersive View* (New York: Columbia University Press, 2008), 147. On celestial globes, see Brooke Belisle, "Nature at a Glance: Immersive Maps from Panoramic to Digital," *Early Popular Visual Culture* 13, no. 4 (October, 2014): 313–35.

[43] Griffiths, *Shivers down Your Spine*, 139.

hundred spectators seated in a concentric arrangement around the projector. They often included panoramic horizons representing the skylines of their cities that underscored the respective locations of the viewing situation. The spectators were science museum visitors, and their gaze was directed upward at the dome while they heard the disembodied voice of a lecturer/controller who stood at the control board in the center and pushed buttons to manipulate the virtual universe. The shows, which had a duration of around forty minutes, were likened to a time machine in that they could fast forward or reverse time to show the night sky thousands of years before or after the time of viewing. This hypermediated time travel, as Griffiths stresses, was a crucial component of the sensation provided by large-scale planetarium performances—an immersive spectatorial experience that she distinguishes from two-dimensional forms by the "defining characteristics" of remediation, reverence (or "a reverential gaze"), and fantasy.[44]

A Trip to the Moon, by contrast, was shown in the Music Hall, a space with nearly 3,000 seats, and similar venues designed to accommodate a range of entertainments, from concerts to illustrated lectures to plays. Its *dispositif* consisted of the darkened theatre, an illuminated screen within the stage's proscenium, and a specific lecture. The show's scenic and lighting effects were choreographed and manually performed downstage, behind the scrims and drops. The lecturer, a renowned astronomy popularizer (Serviss), was familiar and visible to the general audiences attending the evening or matinee performances, and their gaze was directed toward the stage/screen picture. Rather than offering a fantastic, reverential, or embodied experience of virtual armchair travel, it provided a continuous, ninety-minute "evening-long entertainment" that merged "screen practice" with "theatrical culture," to invoke two of Charles Musser's

[44] Griffiths, *Shivers down Your Spine*, 285–86.

terms.[45] As an ephemeral screen entertainment with astronomical moving pictures sculpted in time and painted by electric light, *A Trip to the Moon* was a singularity, albeit a boldly heterogeneous one with myriad intermedial and technological correspondences. The show's uniqueness can be attributed to the synchrony of emergent electrical effects and contemporary astronomical knowledge. As Lawrence identified: "in this science and nature for the first time joined hands."[46]

How did *A Trip to the Moon* make meaning in 1892 New York? Nineteenth-century astronomical magic lantern performances were, as Charlotte Bigg and Kurt Vanhoute note, "hybrids of popular science and spectacle, of education and pleasure" that created "playful shifts in the temporal and spatial position of the spectator with respect to the solar system."[47] As such, as Bigg and Vanhoute rightly point out, their cultural consumption can "reveal ways in which individuals and societies conceptualize and map our place in the universe"[48] Whereas earlier performances presented the heavens as evidence of the work of a Supreme Being and plotted its audience's coordinates, ever so humbly, in the middle of God's Creation, *A Trip to the Moon* implied a different "cosmic address."[49] In order to understand its cultural as well as technological

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[45] See Charles Musser, "Toward a History of Screen Practice," *Quarterly Review of Film Studies* 9, no. 1 (2009): 59–69 and "Towards a History of Theatrical Culture: Imagining an Integrated History of Stage and Screen," in *Screen Culture: History and Textuality*, ed. John Fullerton (Eastleigh, England: John Libbey Publishing, 2004), 3–19. While Musser's pioneering essay on "screen practice" enriched the study of early cinema by addressing the interrelations between motion pictures and lantern shows, his conception of "theatrical culture" proposed a new paradigm for understanding theatrical entertainment as overlapping and interpenetrating exchanges between film and theatre.

[46] Lawrence, "Solving Lighting Problems."

[47] Kurt Vanhoute and Charlotte Bigg, "On the Border between Performance, Science and the Digital: The Embodied Orrery," *International Journal of Performance Arts and Digital Media* 10, no. 2 (2014): 256.

[48] Vanhoute and Bigg, "On the Border," 257.

[49] Hsiang-Fu Huang, "When Urania Meets Terpsichore: A Theatrical Turn for Astronomy Lectures in

and aesthetic implications, the performance demands—insofar as is possible, given its ephemerality—to be read as a complete "text." Such a text requires archival excavation, historical examination, close reading, and detailed inquiry into its specific practices—a media archaeological approach, to be sure, that can shed light on how the performance understood and mapped both its place in late nineteenth-century mediascape and its audience's place in the cosmos. In the pages that follow, I will trace *A Trip to the Moon*'s origins in Berlin and discuss its transatlantic crossing to New York, where, as I hope to show, it was transformed from a romantic spectacle into a modern wonder.

From *From the Earth to the Moon* to *A Trip to the Moon*

From the Earth to the Moon was created in 1889 at the Urania Institute, Berlin, the brainchild of astronomers Wilhelm Foerster and Max Wilhelm Meyer.[50] Foerster, a former student of Alexander Von Humboldt, proposed a popular observatory to satisfy the demand of visitors to the Berlin Observatory, which he directed. Meyer, a science popularizer from Vienna who became the first director of the new institute when it opened in July 1889, modified the plan to include other natural sciences and an auditorium "in which curious or remarkable natural phenomena could be presented to the public by the aid of scenic art."[51] Along with the observatory, the Urania Scientific Theatre was a major attraction at the Institution. No mere auditorium, it was outfitted with a state-of the-art ensemble of stage and screen apparatus: Herr

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Early Nineteenth-Century Britain," *History of Science* 54, no.1 (2016): 45–70.

[50] Ole Movig, "The Berlin Urania, Humboldtian Cosmology, and the Public," in *The Heavens on Earth*, ed. David Aubin, Charlotte Bigg, and H. Sibum (Durham, NC: Duke University Press, 2010), 330.

[51] Max Wilhelm Meyer," The Urania Gesellschaft," *Publications of the Astronomical Society of the Pacific* 2, no. 9(1890): 144.

Brandt of Berlin's Royal Theatre designed the stage devices; C. Hoppe & Co. furnished the hydraulic stage machinery; the electrical lighting was by Siemens & Halske; and the "6,000 candle-power electric light lantern"—arranged to project microscopic, polariscopic, and spectroscopic phenomena as well as transparent and opaque objects—was by Plössl & Co. of Vienna. Accordingly, as Meyer stressed, "Attention may be called here to the fact that our entertainments are not mere lectures, but are given with all due regard to spectacular effect, the assistance of the scenic artist and stage mechanician being called upon to supplement the work of the physicist or the astronomer."[52]

In theory, one might say, Urania's Scientific Theatre was designed in the Romantic spirit of Humboldt's *Cosmos*, which presented a harmonious, holistic image of the universe, and Richard Wagner's aesthetic ideal of the total artwork. In practice, the enterprise was a key component of the Institute's educational program. During its first year, it offered 582 thirty-minute lectures (lantern exhibitions) and 313 ninety-minute lectures (theatre spectacles) to around 100,000 attendees, nearly thirty percent of whom were students and members of workingmen's societies. Its receipts for this period were over $26,000.[53] The international press took notice. In December 1890, the *New York Times* published a glowing review of the Scientific Theatre, "a diorama which displays the various grand phenomena of nature, and is fitted out with all the technical arts of the stage." It also reproduced a partial transcription of *The Workings of Water as Viewed on an Arctic Excursion*, a performance in three acts and twelve scenes, written by Meyer, with scenery by H. Harder and W. Kranz, and Herr Bergmann as lecturer. The article

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[52] Meyer, "The Urania Gesellschaft,"150.

[53] Meyer, "The Urania Gesellschaft,"151.

concluded with a subtle message: "Would [it] not be a public boon to the American Nation and do much to satisfy the craving so universal among men for rational entertainment? In establishing such an institution the founder would be conferring a boon on the countless thousands in the future who would rise up and call him blessed."[54]

The New York entertainment world answered the call. In September 1891, the *New-York Tribune* reported that "A stage representation of the phenomenon of science, planned with strict correctness, is a novelty that will be seen here for the first time in the course of a few months."[55] The article went on to describe how the president of the Music Hall Company, Morris Reno, had seen the spectacles at the Urania Scientific Theatre in Berlin and had secured *From the Earth to the Moon* and *The History of the Primeval World* for Carnegie's new Music Hall, which planned to present it as in Berlin, but "on a much grander scale." (At that time, the Main Hall had 2,764 seats, versus the Scientific Theatre's 400). The scenes were being painted in Berlin, and the Music Hall's stage was being rebuilt and refitted. "It will thus be seen," the article concluded, "that on the large stage of the Music Hall the effects are likely to be produced much better than in Berlin."[56] By December 1891, Reno's plan for mounting the entertainment was coming together nicely. The Music Hall was undergoing renovations, installing electrical wiring and lighting, and receiving production elements from Germany. J. Carl Mayrhofer, an electrical engineer brought over from Berlin by Mr. Carnegie, was overseeing the electrical installation.

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[54] "Science on the Stage," *New York Times* December 28, 1890.

[55] "The Fairy Tales of Science," *New York Tribune*, September 27, 1891.

[56] "The Fairy Tales of Science."

Reno himself made another trip to Europe, perhaps for last-minute negotiations.[57] A sophisticated transnational exchange was well underway.[58]

The scaled-up New York production of *A Trip to the Moon* premiered at the Music Hall on February 10, 1892, where it was offered three times a week: Monday and Wednesday evening performances and a Saturday matinee. Tickets were priced at $1 for the best seats and 50 cents for the others. During its initial run, it received decidedly negative reviews. According to the *New York Times* review of February 11, the scenes were fascinating and remarkably beautiful, but "too good to be framed in so laborious a setting of wood."

Figure 3.5. *A Trip to the Moon*, "Scene 5: A Lunar Landscape Illuminated by the Earth" and production. Detail from cover of *Scientific American*, 9 April 9,1892.

[57] The Music Hall ledgers for the Urania Spectacles reflect expenses associated with these preparations. The production was very costly indeed: in December 1891, the company's expenses exceeded $20,000—over $500,000 in today's economy. Subsequent expenses include payments made to Serviss, Mayrhofer, and W. T. Gregg, and various costs related to mounting *The Wonders of America*.

[58] Andreas W Daum,"' The Next Great Task of Civilization': International Exchange in Popular Science: The German-American Case, 1850–1900," in *The Mechanics of Internationalism: Culture, Society, and Politics from the 1840s to the First World War*, ed. Martin H. Geyer and Johannes Paulmann (Oxford: Oxford University Press, 2001), 313.

The lecture, given by an actor reading Meyer's script, was particularly problematic: "The language … is stilted and sounds as if written for German-philosophical children who asked for a fairy story. This is, in fact, the idea of the author, Dr. Wilhelm Meyer, Director in Chief of the Urania Society of Berlin." The overall experience—the combination of stunning scenes, stilted language, and grave delivery—was "strangely unsatisfying." The critic concluded that "the lecture should be made more colloquial in style, and the reader should not act as if he believed himself to be inspired."

On February 20, the Music Hall closed the show for nine days. During this hiatus, *A Trip to the Moon* was entirely remodeled. Serviss, an astronomy lecturer who had been managed by Lyceum legend Major J. B. Pond since 1890, was admired for his "agreeable lack of prosy technicalities." He was enlisted to rewrite the script, rework the production, and give the lectures.[59] Serviss appears to have adopted a much more modern and forward approach to the material. He streamlined *A Trip to the Moon* from a longer performance in three acts with pauses between scenes to a continuous ninety-minute show. He eliminated extraneous scenes that showed various phenomena of the sun, moon, and Earth from space and cut directly to the view of the moon. And, he reduced the total scenes from eleven to nine and created entr'actes with astrophotographic views by Roberts and others, produced by optician William T. Gregg, and projected with a Gregg "photo-opticon" that gave the screen entertainment a different ontological status.[60] The final scenes were: 1. An Eclipse of the Sun; 2. Within 24,000 Miles of the Moon; 3.

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[59] "Popular Astronomy," *New York Times*, March 15,1889.

[60] William T. Gregg, Manufacturing Optician was established in New York in 1843. In 1892, the firm was located at 122 Fulton St. where it offered a variety of photographic apparatus and services, including slide making. Gregg's "Photo-Opticon" was likely the firm's name for its version of the stereopticon, a double

Lunar Landscape in the Vicinity of Aristarchus and Herodotus; 4. On the Shore of the Bay of Rainbows; 5. A Lunar Landscape Illuminated by the Earth; 6. Solar Eclipse as Seen from the Moon; 7. Return to the Earth—A Lunar Eclipse seen from a Mountain Top; 8. An Extinct Crater in the Indian Ocean; and 9. At Home Again.

It seems Serviss's approach to the lecture was similarly progressive. For instance, his touch can be gleaned from a comparison of his and Meyer's narration for "Scene 6: Solar Eclipse as Seen from the Moon":

> Meyer: The sun has retreated wholly behind the earth's disk and the red rays of the terrestrial region of twilight have acquired such potency that they throw a magical hue across the lunar landscape. It is the only moment in the monotonous variation of the moon's astronomical relations in which the contrasts are softened, and lovlier [sic], more assuring hues tinge the mountainous wilderness and delight the human eye for a brief space. This amiable light comes from the earth, the moon's astral mother. Through the only agency of communication that is still left to her, space-piercing light, she sends a last greeting to her only daughter, lost so early in death, and pours out upon her a flood of the rosy light of life and love.[61]
>
> Serviss: As the moon moves around the earth, nearly in the plane in which the earth revolves around the sun, it is manifest that it must, at times, get into such a position that the earth will be just between it and the sun. Then, of course, a solar eclipse will occur upon the moon. But such an eclipse would present phenomena far different from those which we behold during a solar eclipse upon the earth. The most remarkable difference would be that arising from the fact that the earth is enveloped in air. The atmosphere of the earth, owing to its refractive property, acts like a lens surrounding the terrestrial globe, and bends the sunlight around its edge. So, when the sun disappears behind the earth as seen from the moon, a brilliant circle of light girds the earth, and this light, being thrown, so to speak, by refraction into the earth's own shadow, produces a considerable illumination on the moon. The color of the luminous ring encircling the earth, under these circumstances, will be that of the sunrise and sunset sky, because the light has to

lantern with oxy-hydrogen or carbon-arc illumination that was often associated with the projection of photographic views.

[61] *Urania Scientific Theatre in the Music Hall, New York. "A Trip to the Moon." Representations Commence February 10, 1892*, souvenir booklet (New York: Carnegie Hall Archives, 1892), 24.

> penetrate the dust and vapor floating in the air, and the red rays most easily accomplish the passage.[62]

Meyer's lecture, delivered in what is now termed the "voice of God" style of an omniscient narrator, employs a metaphor to describe what is shown in the scene: Earth and moon are mother and daughter, and the phenomenon of the eclipse is a final message of love from living parent to dead child. Serviss, in contrast, retaining his first-person plural tense and use of the conditional, enhances and complements the scene with scientific explanations of how solar eclipses occur on the moon (the Earth and moon's similar orbital planes) and how they would differ from those seen on the Earth—how the Earth's atmosphere produces the optical effects of red light projected onto the moon's surface.

More than Serviss's streamlining of the show and additions of photo-opticon views, his rewrite of this scene encapsulates the shift from romantic/sublime to modern/wonder that occurred during the hiatus. The scene itself, identified by *Scientific American* as "probably the most unique of the cosmic phenomena" (and the show's likely crescendo), represented the moon's surface with painted canvas lit by footlights from below, and the sun with a light box sewn into a black drop outfitted with star holes.[63]

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[62] Garrett P. Serviss, *Wonders of the Lunar World, or a Trip to the Moon,* Urania Series No. 1 (New York: Morris Reno, 1892), 16.

[63] "A Trip to the Moon," *Scientific American* 61 (1892): 229.

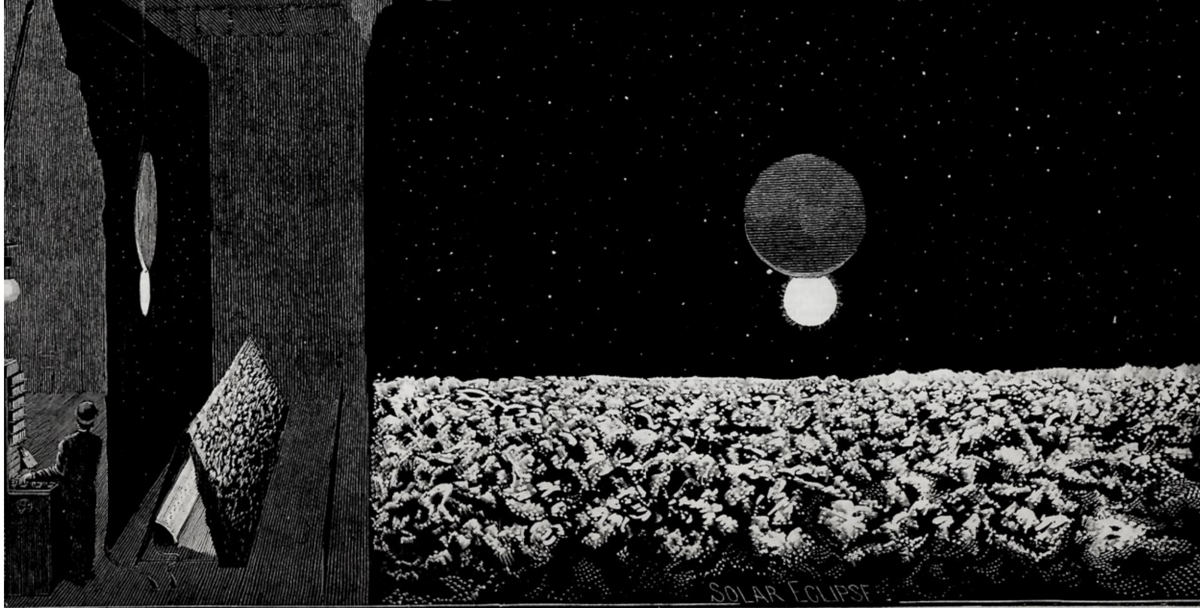

Figure 3.6 *A Trip to the Moon*, "Scene 6: Solar Eclipse as Seen from the Moon" and production. Detail from cover of *Scientific American*, April 9, 1892.

As the drop with the sun lifted, the footlight increased, and as the earth disc—painted in phosphorescence and surrounded by red gelatin—crossed the sun, the crimson hue in the sky was transferred to the moon's surface by red footlights. It is easy to see how the combination of this spectacle and Meyer's script would have been strangely unsatisfying for the *Times* critic. On the one hand, the vivid, brilliantly illuminated views of the moon's surface could "quicken the interest of anybody who ever looked up into the sky at night and wondered at what he saw there." On the other hand, the sermon-like lecture made the entertainment drag, and the audience was "edified so gradually that there (was) more awe than comfort in it."[64] Likewise, it is easy to see how Serviss remedied the situation with a lecture that was modern and complementary. Indeed, when *A Trip to the Moon* reopened on February 29, it received rave reviews. In the mainstream press, critics referenced the problems with the previous version and noted that

[64] "The Moon at Music Hall," *New York Times*, February 11, 1892.

Serviss's personal efforts—his knowledge of the subject, wording, and performance—had, as the *Brooklyn Daily Eagle* put it, "wrought" the show "into a very well defined and substantial success."[65] Other reviews noted the informative and entertaining lecture, the gorgeous stage pictures, the continuous pleasure provided by the photo-opticon projections, and successful unveiling of the fascinations of astronomy.

But Mayrhofer's lighting effects were so marvelous that they were a cause for applause in and of themselves. Mayrhofer, who appears to have been a rare combination of lighting effects artist and electrical wizard, was introducing improvements "almost nightly in these effects."[66] The trade press especially heaped praise on Mayrhofer's lighting apparatus and design. According to the *New York Dramatic Mirror*, his work stood apart from that of the scenic painting: "It appears that the scenery used at Music Hall in the spectacles of Urania is … inferior to scenic work … of this city at this time, the astonishing effects in these spectacles being more largely due to the great ingenuity of … Mr. Mayrhofer, of Berlin, who has designed many novel lighting effects which in themselves set off very ordinary work of the scenic artist brilliantly."[67] *Scientific American* noted that as "interesting as these imitations of celestial and terrestrial phenomena are, the manner in which they are effected is still more so." It went on to describe each apparatus and its corresponding effects in great detail, as did *The Electrical Engineer*, which also heralded the performance as exemplifying the "perfection to which stage lighting has

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[65] *Brooklyn Daily Eagle*, March 6, 1892.

[66] Garrett P. Serviss, "From Chaos to Man," *Scientific American* 61(1892): 407.

[67] *New York Dramatic Mirror*. May 8, 1892.

arrived."[68]

While Mayrhofer was the first to represent moving pictures of natural lunar phenomena for their own sake as opposed to enhancing dramatic action or spectacle, he was more importantly the first to do so electrically, and his effects revolutionized the New York stage. Prior to installing the system at the Music Hall, he had been working in the field for nearly fifteen years in Germany, where thorough principles of electric theatre lighting were first devised.[69] While European theatres were fully equipped with electric lighting systems in the 1880s, American theatres, though more advanced in scenery, were years behind in lighting. Given that the practice of darkening the auditorium did not begin until 1888, Mayrhofer's effects would have been considered pathbreaking as well as novel.[70] As Louis Salter, who began working at the Music Hall (as Carnegie Hall was called in the early years) as an assistant electrician under Mayrhofer, recalled "I was the first man to produce a rainbow effect by electricity on any stage in America.… Never before had thunder, rainbows, clouds and winds been produced by electricity."[71] Moreover, they enriched "the possibilities of the stereopticon by freely drawing in its behalf upon the resources of the stage," as the *New York World* review of

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[68] "A Trip to the Moon"; "Electric Lighting on the 'Urania' Theatre Stage," *Electrical Engineer* 8 (1892): 254.

[69] Ward Electric Company, *Theatre Lighting Past and Present* (New York: Mt. Vernon, 1923), 17.

[70] Lawrence, "Solving Lighting Problems." See also Rees, *Theatre Lighting in the Age of Gas*, 167–203 and Frederick Penzel, *Theatre Lighting Before Electricity* (Middletown, CT: Wesleyan University Press, 1978), 69–75.

[71] Ethyl Peyser, *The House that Music Built* (New York: Robert M. McBride, 1936), 172.

February 28, 1893 put it, and transformed the lowly gas man, generally considered a common stagehand, into a very important person on the other side of the curtain.[72]

But in addition to Serviss and Mayrhofer, *A Trip to the Moon* had a third star. The magic lantern's role in the production was central, if uncredited: It perfectly imitated the reflections of the sun and moon on the wavy water surface; it faithfully reproduced the heavenly bodies, and all of the elliptical and ecliptic curves traversed or described by them; it illuminated the screen with astrophotographic views of galaxies; and it accurately represented the eclipses of the moon, the sun, and its corona. And just as it ascended a rig to perform a sunrise over the lake at the beginning of the show, so it rose again as a moon at the end, while Serviss said,

> We cannot visit the moon, even in imagination, without having our ideas about it completely changed, if we set out with any expectation of finding it an inhabited or inhabitable globe. It is but too plain that the moon is a barren and dead world. And its condition is prophetic of the fate which, in the remote future, will overtake the earth…. But, after all, when evidence of decay present themselves throughout the starry spaces … it is not they that should chiefly command our attention, but rather the indications of that life which breathes through the universe, and is as eternal as the heavens.[73]

Thus *From the Earth to the Moon* became *Wonders of the Lunar World, or A Trip to the Moon*, and thus electrification established new kinds of moving images and experiences. Although Reno and the Music Hall Company imported the production from the Urania Gesellschaft in Berlin, it clearly underwent a major transformation in New York. The move from a popular observatory with ties to the state to a new for-profit concert hall that was designed to showcase the world's best artists required a different presentational approach to the astronomical performance. The scenery was made larger and the lighting modified to accommodate the Main Hall, and the

[72] *New York World,* February 28, 1893.

[73] Serviss, *Wonders of the Lunar World*, 20.

effects were progressively improved throughout the run.[74] The scenes were reduced from eleven to a streamlined nine, and the photo-opticon projections that were added between them not only provided continuous flow during the scene changes, but also imparted a different ontological status by incorporating the medium of photography into the production. The lecture likewise shifted from the sublime "Wagnerian drama of the heavens," as the February 11 *New York Times* review put it, to an eloquent ninety-minute presentation that delighted audiences while offering a professional astronomer's idea of the moon's features and phenomena. Most of all, *A Trip to the Moon* mapped its audience's place within a living universe, with the cosmic address of 881 Seventh Avenue, New York, NY, United States, Earth, Solar System, Milky Way.

At Home Again

Wasn't *A Trip to the Moon* a stage spectacle with scientific pretentions? It aimed to attract a middle- and upper-class, theater-going public that patronized the Metropolitan Opera and the city's finest concert and lecture halls with the newest form of spectacular scenery. And its targeted audiences duly responded with applause as each scene unfolded. What is more, the production seemed to be, at least indirectly, invested in promoting the use of electricity in the theatre with its spectacular lighting effects. Thomas Edison himself had, in 1884, planned and installed the first incandescent lamps in a US theatre —a rudimentary lighting system in Boston's Bijou Theatre—and manipulated the lights from the prompt corner on the opening night of the US premiere of Gilbert and Sullivan's *Iolanthe*, the first new theatre production in the world to be illuminated entirely by electricity when it premiered in London's Savoy Theatre

[74] Garrett P. Serviss, *The Seven Ages of Our World, or from Chaos to Man*, Urania Series No. 2 (New York: Morris Reno 1892).

in 1882. In September 1889, he visited the Urania Gesellschaft where he was given a private showing in the Scientific Theatre with Dr. Werner Siemens and a small welcoming committee. On leaving, he requested a catalogue of the institution's apparatuses and offered to send copies of his instruments upon his return to the US.[75] While his "Electra" float overtly announced the wonders of electric light during the 1892 celebration of the 400th anniversary of Columbus's "discovery" of America, *A Trip to the Moon* offered a subtler showcase for the new medium earlier in the "Columbus Year."[76]

However, *A Trip to the Moon*'s spectacles were not mere spectacles, but scientifically-inscribed, luminous moving pictures of astronomical phenomena. The features of the lunar landscape were faithfully represented in accordance with facts derived from astrophotography, trigonometry, and mensuration. These images, moreover, were not on display, as in a montage of attractions in a popular scientific demonstration, but wholly integrated into a narrative. The lecture that narrativized them faithfully delivered scientific explanations while uniting word and image into an artistic whole. As evidenced by the show's reception, the lecture was as praiseworthy as the moving pictures of lunar phenomena. In *A Trip to the Moon*, science and stage science elucidated and mutually enhanced each other, and audiences were provided with an experience of what the moon would be like if one could travel there. They viewed it from on- and off-world perspectives. They experienced a view of the Earth from the moon and appreciated its spectacular beauty. They gazed at a scene of the sun from the moon and beheld its coronal streamers and stars in broad day—views that are obscured by the Earth's impure and unsteady

[75] *Urania Scientific Theatre in the Music Hall, New York*, 29.

[76] Nadis, *Wonder Shows*, 55.

air. And in scenes from the moon's surface, they explored the Sea of Showers, the Ocean of Storms, and the Bay of Rainbows. Seen from the corner of Seventh Avenue and Fifty-Seventh Street after an evening performance of *A Trip to the Moon*, the actual moon would have been understood and wondered about in another way.

This chapter has aimed to realize two related ambitions. It began with the assertion that astronomical performances shifted from an appeal to the sublime to wonder in the late nineteenth century, within a relatively stable historical *dispositif*. My account of *A Trip to the Moon* has tried to show how the lantern's interchanges with the new medium of electric light in a minor astronomical entertainment modernized audience experience while expanding the uses of the lantern and creating new avenues of expression for it in the twentieth century. If new media, as Marvin argues, "are always introduced into a pattern of tension created by the old and the new, which is far richer than any single medium that becomes a focus of interest because it is novel," then, to my mind, *A Trip to the Moon* exemplifies this dynamic.[77] As to the question of whether this case creates a place for the lantern within cinema's ongoing pattern of transformation, it depends on how broadly cinema is defined. It certainly suggests that the lantern, as one of cinema's "family relations," enjoyed ongoing transformations of its own, before and after the emergence of motion pictures.[78] To the question of whether it demonstrates a modern viewpoint, I would say it does in that its still and moving screen images were based on space-probing astrophotographic and telescopic (mediated) vision. Lastly, in terms of pointing to roads not yet taken, I would posit that the entertainment's evening-long, narrativized format, representations of

[77] Marvin, *When Old Technologies Were New*, 8.

[78] Elsaesser, "The New Film History," 93.

the moon's landscapes, and realization of its phenomena resulted in a form of screen entertainment that was remediated several decades later in such feature-length nonfiction films as Hanns Walter Kornblum's *Wunder der Schöpfung/Our Heavenly Bodies* (1925). But just as the form of lantern performance I have elaborated constituted unprecedented moving pictures of the lunar world, so too did it achieve extraordinary effects, which can deepen our historical understanding of special effects and CGI in digital works such as *Cosmos: A Spacetime Odyssey*.

As for *A Trip to the Moon*, it was performed, along with *From Chaos to Man,* at the Music Hall and other New York theatres through spring 1893. It also made a small regional tour of East Coast venues from Portland to Washington and received critical acclaim wherever it went.[79] The Music Hall produced a third "Urania Spectacle," *The Wonders of America*, which was entirely created in the US and that highlighted the natural beauty found in its National Parks. Ultimately, the "new style of entertainment" offered by the Urania Spectacles was not sustainable.[80] As hybrids between illustrated lectures and theatrical productions, their appeal was too niche to justify the cost of mounting them, and they were retired in lieu of touring more widely. Garrett Serviss, who had been a newspaper reporter and writer by day, quit his job at the *New York Sun* in 1892 to lecture full time, which he did on the platform as well as in the Urania shows. He also wrote a syndicated column on astronomy and a number of science-fiction novels,

[79] In addition to the 54 performances at the Music Hall and two additional New York performances at Daly's, the Music Hall Company of NY's Urania Spectacles—either *A Trip to the Moon*, *The Seven Ages of Our World (From Chaos to Man)*, or *Wonders of America*—were given in the following cities: Philadelphia (8); Boston (9); Washington, DC (9); Brooklyn (10); New Haven, Bridgeport, and Hartford, CT (4); Springfield, MA (2); and Portland, ME (1). All told, the returns for the ninety-nine performances represented about 30 percent of the cost. The Urania Gesellschaft's entertainments toured "several European cities" (Daum 2001, 312); however, they were likely in keeping with Meyer's Berlin shows.

[80] *Urania Scientific Theatre in the Music Hall,* 12.

including *Edison's Conquest of Mars*. Near the end of his life, he collaborated with Max and Dave Fleisher on their animated documentary, *The Einstein Theory of Relativity* (1923), which included celluloid "remediations" of popular astronomical lantern lectures.

J. Carl Mayrhofer became the director of the Music Hall Urania productions as well as the designer of their electro-mechanical effects. At the end of their run, he remained in New York, where his electrical talent was regularly acknowledged in the trade press, and where his career thrived for the rest of the decade. In the following six years, he made great advances in auxiliary lighting, the branch of stage lighting that most demonstrated the possibilities of electricity in contrast to other illuminants, and perfected a lantern with revolving discs that produced effects in rain, snow, and moving clouds. He also developed and installed his own stage lighting apparatus in a number of theaters, designed lighting effects for Broadway plays, established the Mayrhofer Electrical Stage Lighting Company at 842 Broadway, and sold it to the Kliegl brothers in 1895. He then established a new business at 28 Centre Street, where he continued designing productions and creating new sound and lighting effects apparatus. At the Electrical Exhibition at Madison Square Garden in May 1899, he displayed a new switchboard with sixty-five gradations instead of the usual twenty, with which he demonstrated a range of imperceptible atmospheric transitions from dawn to moonrise, and then he vanished into the night. His innovative work at the Music Hall, however, reestablished the lantern as a wonder-producing machine that could perform the moon in seemingly perfect synchrony with the actual satellite.

Thus imparted with a new range of expression and mimetic power, the lantern was introduced into a range of new entertainment venues at the turn of the twentieth century. On Broadway, it represented the whirling cyclone that transported Dorothy, Imogen (her cow), the

house, and other objects and buildings in the 1902–1903 musical extravaganza, the *Wizard of Oz* (1903). At Coney Island, it created effects in "20,000 Leagues Under the Sea," "Darkness to Dawn," and "The Johnstown Flood." On the vaudeville stage, it created Spectacular Dances, Prismatiscope Dances, and Lobseterscope Dances—dances with stroboscopic effects.[81] And at the Universal Exposition of 1900 in Paris, where one of the attractions was a great telescope trained on the moon, it projected photographs of the moon on Loie Fuller as she danced before a backdrop of stars.

With regard to the pigeons, their performance above the East River evokes a different kind of moving image. Legend has it that Edison invented the light bulb in the summer of 1878, when he traveled to Wyoming Territory to participate in the Draper Eclipse Expedition. During a fishing trip at Battle Lake, after the total solar eclipse of July 29, he is said to have told his friend and associate Professor George Baker, "I looked up at the beautiful stars and clear light and I invented an incandescent electric light."[82] This account, while undoubtedly apocryphal, suggests that electric light was linked to the stars in the late nineteenth-century imaginary. At the turn of the last century, when cinema was still new, Henry Hopwood contemplated this connection and wondered if it might someday occasion a new aesthetic form of "living pictures":

> Light and other vibrations to which our limited perceptions afford no clue travel from this earth into space at a definite velocity. So a continual record of the earth's history in its slightest details is continually streaming off into the eternal void, and … it will be seen that at some point or other in space everything that has happened is yet visible.… The whole history, not of this world alone, but of every sphere that is or has been, is still in vibrating existence, and one universal perception extending through the infinity would

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[81] See *Improved Electrical Theatrical Appliances* (New York: Joseph Menchen Electrical Company,1906), 9-12.

[82] Philip J. Roberts, "Edison, the Electric Light and the Eclipse," *Annals of Wyoming* 53, no. 1 (1981): 54–62.

> embrace within the tremblings of the boundless ether a consciousness of all that was or is, an eternal and universal living picture of all past events.[83]

Even today, Hopwood's bold speculation, given at the close of his book on the long development of motion pictures a few years after their emergence, prompts us to wonder about the possibilities of the "persistence of light" paradigm vis-à-vis our multimedia past, present, and possible futures.[84] Given that the nearest stars are about four light years away from us, we are currently seeing what they were like in 2016. In enacting the stars, the pigeons mirrored this phenomenon, evoking the way light conveys a historical record of the visible universe. Light-based astronomical entertainments might change from epoch to epoch, but at the end of the day, performances like *Mr. Walker's Astronomical Lecture on the Eidouranion, A Trip to the Moon,* and *Fly By Night* are all wondrous because they suggest that the night sky, as the ultimate moving image, will inspire future forms of cinema and media.

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[83] Henry V. Hopwood, *Living Pictures: Their History, Photoduplication and Practical Working* (London: Optician and Photographic Trades Review, 1899), 233–34.

[84] Hopwood's thoughts on persistence of light were inspired by the writings of R. A. Proctor and by Camille Flammarion's *Lumen*. When his *Living Pictures* was first published in 1899, persistence of vision, the theory that the illusion of apparent motion is caused by a delay in retinal processing of afterimages, was believed to explain perceived motion in a range of optical devices, including motion pictures.

Conclusion

Everything but the Picture

However, if one turns from here, that is, from the old story which remains eternally new, to the really new and newest history, to the fantastic changes of technology, then it is not surprising to see even here a place for forming fairy tales, i.e., for technological-magical utopias.
—Ernst Bloch[1]

The Old Testament "Rainbow" was a picture on the sky—the first Lantern slide.[2]
—C. H. Woolston

In this dissertation, I have attempted to develop an alternative approach to the study of the magic lantern, focusing on lantern performances that were in circulation around 1900. Marked by especially rapid cultural and technological change, this turn-of-the-century period presents an opportunity to consider different objects from those offered by traditional histories, which tend to describe a series of technological improvements to an otherwise monolithic image projector and ancestor of the movies. Of course, at the most basic level, the lantern itself (the "hardware") was a projector, and from a purely chronological perspective, it did precede early motion picture projectors. However, it was but one component of a highly variable form of projection performance—sometimes called a "magic lantern show"—with the hereness, nowness, and eventness of theatrical performance. Moreover, at the end of the nineteenth century and the

[1] Ernst Bloch, "The Fairytale Moves on in Its Own Time," in *The Utopian Function of Art and Literature Fairytales: Selected Essays*, trans. Jack Zipes and Frank Mecklenberg (Cambridge, Mass.: MIT Press, 1988), 163.

[2] C. H. Woolston, "A Lanternist's Creed," *Optical Magic Lantern Journal* 11, no. 128: 2.

beginning of the twentieth, it threw an exceptionally diverse array of images for a wide range of viewers and viewing contexts, and rather than standing passively by awaiting its obsolescence, was actively engaged in the transforming popular culture and mediascape. Indeed, the case studies I have presented reveal the lantern's two-way communication with contemporary forms of media, entertainment, and artistic expression—motion pictures, stage melodrama, and electric light—as well as its accumulative nature, its tendency toward repertoire building.

In the c. 1900 lantern, then, we have an exceptionally heterogeneous and Janus-faced phenomenon: an older medium that, while long-established after centuries of use, often experimented with new techniques, trends, and technologies. Not only is this at odds with conventional lantern history, but it is also out of step with recent accounts of turn-of-the-century media, which have focused on the then-new. Thus the lantern has been excluded from the group of mass cultural practices and networks of entertainment that emerged in the 1880s and thrived in the decades that followed. Resituated within this dynamic environment, the lantern compels us to reconsider how we write media history, even as (and especially because) it is being rewritten vis-à-vis the digital turn. It also invites us to undertake a more critical investigation of the relationship between established media and their emerging neighbors.

Therefore, I have tried to attend to the kinds of issues that the lantern can raise regarding old/new media relations more generally, and that arise from its particulars—or more precisely, from its form, language, and style. For the lantern inevitably bears the traces of its interactions with other media as well as its cultural engagement. However, the traces themselves are not always as immediately obvious as they are in, say, the dozen or so lantern slide transpositions of

The Doré Bible.[3] Many are in fact so subtle—the exploration of new camera techniques described in Chapter 1, or the suggestion of naturalist and realist theatre aesthetics described in Chapter 2—that they only become apparent through the very close analysis of the lantern's formal-stylistic elements considered in relation to other media and socio-cultural factors.

Accordingly, in lieu of examining lantern slides as pre-cinema artifacts, I have treated them as the basis of lantern performances—for the narratives, effects, and experiences they were designed to produce in the spaces between lanternists, audiences, and screens.[4] Likewise, rather than investigating these performances in isolation, I have considered them in their broader cross-media, cultural, and historical contexts. And instead of focusing on dominant modes of lantern practice, I have concentrated on a handful of stylistic anomalies and elaborated them in the case studies that form the basis of this dissertation. Individually, they lay bare the active, superposing layers of the lantern's practices and the reciprocal flow of influences between it and other forms; collectively, they paint a much more nuanced and detailed portrait of media in transition, in which old as well as new media continually stabilize and transform through their participation in an ever-changing media ecology. Thus, as I have argued, the lantern emerges as a privileged, if unlikely, site for exploring the relations between aesthetics, technology, and culture.

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[3] See Dan Malan, "Gustave Doré: Magic Lantern Slides," *New Magic Lantern Journal* 9, no. 1 (Winter 2001): 3–6. Malan has located over 720 engravings by Gustave Doré that were made into lantern slides between the 1860s and the 1920s.

[4] Cf. Richard Crangle, "Six (or Seven) Ways of Looking at a Lantern Slide," in *The Practices of Projection: Histories and Technologies*, ed. Gabriele Menotti and Virginia Crisp (Oxford: Oxford University Press, 2020), 87–103.

To be sure, writing this dissertation has necessarily involved studying a much broader range of material than I have dealt with here, both synchronically and diachronically. In order to more precisely analyze what I've identified as stylistic anomalies, I have examined hundreds of conventional lantern slide sets and readings, as well as numerous catalogues, patents, trade journals, reviews, stories, and ephemera that circulated at the turn of the century. At the same time, in order to trace the dialectic between experimentation and standardization across the lantern's longer history, I have excavated as many of the lantern's "other" practices as possible—practices that have remained underexamined, uncharted, or unaccounted for in canonized histories—while recognizing the impossibility of constructing a comprehensive account, given that lantern history, like all history, is multiple and layered. And besides, given the ephemeral nature of lantern performance, myriad practices will remain forever unknown. As lantern historian and modern lanternist Terry Borton once remarked, "Whatever they could think of, they tried."

But among the extracanonical practices I have uncovered in the lantern's 350 years (and counting), not all are useful for my project, and those that are useful are not equally so. One group consists of unusual and possibly one-off experiments, which fall into the category of interesting, if not necessarily pertinent, "discoveries." When searching on the Internet for lantern exhibition in early twentieth-century Germany, for instance, one might come across a description in a digitized trade journal of a June evening in 1911, when astonished Berliners observed thirty different "advertising legends" displayed on the Parseval IV, one of Count Zeppelin's dirigibles, as she sailed above the city for an hour and a half at an altitude of 500 feet. The luminous

slogans were projected in rotation by an electric stereopticon attached to the gondola. "The surprise created by these changing aerial signs," wrote the foreign correspondent, "can well be imagined, even among progressive citizens of Berlin."[5] For the purposes of this study, events like this advertising "stunt" are marginally useful because they contribute to a sense of the overall heterogeneity in lantern practice.

A second group includes a variety of hybridizations, transpositions, and collaborations that highlight intriguing interconnections between the lantern and other forms. In doing so, they can reveal more diversity and complexity in lantern practice than their now canonized and then-established contemporaries. So, the haute police napoléonienne's use of lantern projection to frighten deserters traveling on obscure woodland trails in ca. 1813 is potentially more revealing than Etienne-Gaspard Robertson's later "Fantasmagories," given some years after the early performances at the ruins of the Convent des Capucines.[6] A lantern transposition of Albert Smith's *Ascent of Mount Blanc*, created by a certain Mr. Martin in 1857, while Smith's moving panorama performance was playing at Egyptian Hall, might be more telling than a long-running exhibition of dissolving views at the Royal Polytechnic.[7] Georges Demenÿ's "talking picture"

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[5] "Dirigible Balloons as Sign Boards," *Popular Electricity* 4, no. 2 (June 1911): 127.

[6] See J. A. Boymans, *Le garde d'honneur: ou Épisode du règne de Napoléon Bounaparte* (Bruxelles: Chez Weissenbruch, Impremeur du Roi, 1822). Reviews from Robertson's 1811 Phantasmagoria indicate that it lacked the "impact and terror of the early performances at the Capucine convent." See *Encyclopaedia of the Magic Lantern*, 257.

[7] See Erkki Huhtamo, *Illusions in Motion: Media Archaeology of the Moving Panorama and Related Spectacles* (Cambridge, MA: MIT Press, 2013), 233. According to Huhtamo, lantern versions of Smith's lecture were "shown far and wide."

exhibitions given in Paris in 1892 with his Chronophotophone—a combination of lantern, slides, and cylinder phonograph—might be more illuminating than the lecture set, "Around the World in Eighty Minutes" that Sears, Roebuck, and Co. offered with their "Professional Lecture Outfit."[8] These kinds of practices are useful because they deepen our understanding of the lantern's hybrid nature while also inviting interdisciplinary reflection.

The third and most useful group consists of the kinds of telling practices that are the basis of the case studies in this dissertation. These are practices which, in their historical and case specificity, reveal something of the lantern's external and internal dynamics: the ongoing interplay between the lantern and neighboring forms and the emergence and maintenance of standards and aberrations in lantern practice. In other words, they picture the lantern as both a translator of other media and a medium in its own right, responding to its technological, aesthetic, and cultural milieu, giving rise to new innovations, and embedding new practices into its ever-expanding repertoire. In doing so, they help us recognize the intertwining patterns of superposition and reciprocity throughout lantern history while encouraging us to seek them out in the larger universe of media history.

But why these three? In addition to the above reasons, I have specially chosen these cases because they portray most vividly these dynamics during the first decade of motion pictures. Part

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[8] Sears, Roebuck, & Co., *Catalogue* (1902; reprint, New York: Dover, 1969), 167. The eighty-minute world tour was a longstanding trope in stereopticon lectures. Marcy already offered a slide set of "A Tour of the World in Eighty Minutes" "in plain photographs from nature" in the 1870s. See L. J. Marcy, *The Sciopticon Manual, Explaining Marcy's New Magic Lantern and Light, Including Lantern Optics, Experiments, Photographing and Coloring Slides, Etc.,* 6th ed. (Philadelphia: James A. Moore, 1877), xxv.

of my aim here has been to unsettle not only earlier teleological understandings of the lantern-film relation, but also subsequent valorization efforts that have overstressed the continuities between the two screen practices. In these more recent accounts, the period of pronounced overlap at the turn of the century has been portrayed as either a "*milieu*" in which the lantern nurses the cinema "through its extended period of invention" or an "elbow to elbow magic lantern/cinematographe position" in which early filmmakers "pillage the lantern repertory."[9] Yet these correctives are as problematic as that which they have sought to correct; by focusing on the unidirectional impact of the lantern upon cinema, they tend to either close off other avenues of inquiry into the lantern or redirect attention inward toward its exclusive study. What is more, neither is able to account for the lively back-and-forth demonstrated by my research: how, for instance, Bamforth's Life Model lantern series, *The Fireman* (1902), remakes James Williamson's motion picture, *Fire!* (1901), and how both remake Theobald's chromolithographic lantern series, *Bob the Fireman* (1893). Interestingly, none provide a precedent for the much-discussed successively presented interior and exterior views of the same action in Edwin S. Porter's *Life of an American Fireman* (1903).[10] By re/presenting the "late" lantern in flux alongside early film—looking forward, looking backward, looking *around*; borrowing from,

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[9] See Deac Rossell, "Double Think: The Cinema and Magic Lantern Culture," in *Celebrating 1895: the Century of Cinema*, ed. John Fullerton (London: John Libbey, 1998), 30, and Laurent Mannoni, "Elbow to Elbow: The Lantern/Cinema Struggle," *New Magic Lantern Journal* 7, no. 1 (Jan 1993): 3.

[10] See Charles Musser, ''The Early Cinema of Edwin Porter,'' *Cinema Journal* 19, no. 1 (Fall 1979): 1–38; André Gaudreault, ''Detours in Film Narrative: The Development of Cross-cutting,'' *Cinema Journal* 19 (Fall 1979): 39–59; and Noël Burch, "Porter, or Ambivalence," *Screen 19* (Winter 1978–79): 91–105.

reflecting upon, and responding to an especially wide range of aesthetic and cultural forms, itself included—these three cases establish fertile ground for both the reconceptualization of the lantern and the opening up of new research perspectives.

My broader aim in choosing these images, then, has been to offer a new way of thinking with and through the lantern in tandem with early cinema studies: a *lanternological* frame that can embrace the lantern's continuities, ruptures, and ambivalences, while also serving as a heuristic tool for exploring our established and emerging mediascape. Standing on the shoulders of the film historians whose papers on early fiction film from 1900–1906 at the 1978 Brighton Symposium focused on a smaller group of "unusual and outstanding films, not the ordinary ones," I have focused on a selection of extraordinary lantern performances of the same period that challenge teleological assumptions about lantern and media history by illustrating the late lantern's stylistic experiments, modes of representation and address, and engagement with cultural and technological modernity.[11] At the same time, they also illuminate the lantern's underlying nonsynchronicity, or what Ernst Bloch termed the "simultaneity of the non-simultaneous": how very old practices traceable to seventeenth-century Europe exist in the same moment as the newest practices of 1900.[12] They thus contain emancipatory and utopian possibilities for the projected image. Indeed, once we start looking at media history from the

[11] Eileen Bowser, "Preparation for Brighton—the American Contribution," in *Cinema 1900/1906: An Analytical Study*, 4.

[12] See Ernst Bloch, "Nonsynchronism and the Obligation to its Dialectics," trans. Mark Ritter, *New German Critique* 11 (1977): 22–38.

perspective of the late lantern, even the comparatively stable periods of the past may begin to seem less uniform and homogeneous, and the future less convergent and determined.[13] At the end of the day, I have chosen these three images because they are hopeful.

At this preliminary stage, the approach of lanternology that I am developing—here pertinent to c. 1900, but also applicable to periods that precede and follow—involves excavating, investigating, and critically situating concrete moments in lantern history that can transform our understanding of media history. But it also involves adopting a number of oblique methods: attending to what happens between images, reading performances with and through other texts, and deciphering the meaning of primary source texts, to name a few. Perhaps most unusually, lanternology often entails studying the lantern by looking closely at what is not there, or rather not directly visible.

In many ways, this method is analogous to the transit technique in astronomy, an indirect method of detecting planets beyond our solar system. When a distant planet transits the face of its host star, it temporarily blocks some of the starlight, causing a small drop in brightness. In the transit technique, astronomers train their telescopes on distant stars to search for these periods of dimming light, which can not only reveal the presence of the unseen planets, but also provide information about their size, physical structure, and even elements in their atmosphere. Similarly, lanternology often involves attending to various absences and asymmetries that betray the

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[13] Miriam Hansen, "Early Cinema Late Cinema: Transformations of the Public Sphere," in *Viewing Positions: Ways of Seeing Film*, ed. Linda Williams (New Brunswick: Rutgers University Press, 1994), 149.

presence of the lantern and details about its practices, and in doing so, expands our understanding of our mediascape's past, present, and possible futures. Let me illustrate this with a case study in miniature.

The Third Window

Flash forward to a film show in an Atmospheric Theatre c. 1929, the "transition to sound." The core element, a feature film, was integrated into a much larger program. It was preceded by an orchestral overture, followed by a live presentation act, then a series of shorts (comedies, newsreels, travelogues, animated cartoons), and an organ solo.[14] In many ways, this programmatic approach to motion picture exhibition was nothing new; indeed, the film program had slowly evolved since c. 1900, when the variety format, developed within the traditions of magic lantern performance and the modular vaudeville bill, shaped its structure. In the late 1900s, motion picture programs consisted of a diverse mix of announcement slides, scenic views, illustrated songs, comedies, and dramatic subjects, which were accompanied by music and shown throughout the day. By the early 1910s, with the introduction of multi-reel films, exhibitors began announcing their program sequences in advance, and several years later, when feature-length films became the show's centerpiece, the shorts and live elements were reorganized around them.

[14] Douglas Gomery, *Shared Pleasures: A History of Movie Presentation in the United States* (Madison: University of Wisconsin Press, 1992), 217. See also Paolo Cherchi-Usai, *Silent Cinema: A Guide to Study, Research and Curatorship*, Third Edition (London: BFI, 2019).

But in recent years, motion picture exhibition had undergone something of a transformation. “Film plays” had become more elaborate, theatres grander and more glamorous, and impresarios like Samuel “Roxy” Rothafel incorporated such elements as full-size orchestras, huge pipe organs, elaborate ballet and panotmime presentation acts, in-person appearances, and thrilling light and color effects into the show.[15] So striking was this phenomenon that its popularity in Berlin prompted Siefried Kracauer, in his “Cult of Distraction” essay, to declare: “A glittering, revue-like creature has crawled out of the movies, *the total artwork* [*Gesamtkunstwerk*] *of effects*.”[16] For Kracauer, the presentation could take two directions: the elements of the film show could function as a series of distractions or attractions—“an elevated version of the ‘variety format’,” as Miriam Hansen has argued—or as parts of a thematic whole, centered on the feature.[17] “The essence of the distraction approach,” Tom Gunning observes, “lies in a relative independence of the film and its accompaniments. An approach of narrative integration subordinates the various accompaniments to the film as a form of narrative or information.”[18] Either way, the film show had been reconceived as a self-contained, all-encompassing multimedia experience.

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[15] Ross Melnick, *American Showman: Samuel “Roxy” Rothafel and the Birth of the Entertainment Industry, 1908-1935* (New York: Columbia University Press, 2012).

[16] Siegfried Kracauer, “Cult of Distraction: On Berlin’s Picture Palaces” (1926), in *The Mass Ornament: Weimar Essays*, trans. Thomas Y. Levin (Cambridge, Harvard University Press, 1995), 324.

[17] Miriam Bratu Hansen, *Cinema and Experience: Siegried Kracauer, Walter Benjamin, and Theodor W. Adorno* (Berkeley: University of California Press, 2012), 54.

[18] Tom Gunning, “The Scene of Speaking: Two Decades of Discovering the Film Lecturer,” *Iris,* no. 27 (Spring 1999): 76.

At the heart of this transformation was the Atmospheric Theatre, a new architectural form that had been expressly designed for film shows. Indeed, one could even argue that it was a purpose-built apparatus, akin to the nineteenth-century rotunda panoramas that displayed 360-degree paintings. It was the original conception of John Eberson, who in his article, "New Theatres for Old," stated that it aimed to provide "indoor entertainment with a correct outdoor setting"—the experience of sitting under a canopy of stars at twilight.[19] The auditoriums featured architectural facades evoking exotic locations—a French castle, an Italian garden, a Spanish patio—lighting effects that created slowly moving cloud formations, glowing sunsets, and twinkling stars; and cove-lit domed ceilings painted in a "distinct" crepuscular blue. ("Blue," Eberson wrote, "is always described as the color of Hope.")[20] In Eberson's Atmospheric Theatres, color, light, music, dance, film, showmanship, and architecture combined to create the show.

And where was the lantern? Was it merely projecting coming attractions slides in towns and cities beyond New York, Chicago, and Los Angeles, in the "small theaters [that] continued to provide the backbone of national film exhibition"?[21] Or did it also engage with these "optical fairylands," and if so, what role did it play?

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[19] John Eberson, "New Theatres for Old," *Motion Picture News*, December 30, 1927, 45.

[20] Eberson, "New Theatres for Old," 47.

[21] Richard Koszarski, *An Evening's Entertainment: The Age of the Silent Feature Picture, 19151928* (New York: Scribner's, 1990), 13.

To explore this question, let us examine an actual Atmospheric Theatre, Eberson's 1927 Avalon Theatre on Chicago's South Side (now called the Avalon Regal Theatre). The 2,250-seat auditorium (orchestra and balcony) is designed to resemble the courtyard of a Persian shrine at twilight, with the domed ceiling imitating the night sky. The wall to the left of the screen is modeled after a palace with a dome and minarets, and the wall to the right is designed to resemble a garden with arches topped by tropical trees and plants. The proscenium resembles a fortification wall and is crowned by a cloth canopy and supported by spears. At the back of the auditorium is another fortification that also forms what was once the projection room. Directing our attention to this section, we discover a vertical oblong window fitted in the projection room wall next to two square projection ports. It is this third window that betrays the former presence of the F7 Master Brenograph, a giant biunial lantern (73 inches high and 82 inches long) built by the Brenkert Light Projection Company of Detroit and designed to project "everything but the picture."[22]

While this may seem like deceptive advertising, an examination of Brenkert's catalogues, patents, and artifacts more than validates this claim. The Master Brenograph was in fact a stereopticon, spotlight, and effect lighting system in one. It was outfitted with the equivalent of

[22] On the Brenograph, see Jack Judson, "The Wondrous Brenkert Master Brenograph," in *Realms of Light: Uses and Perceptions of the Magic Lantern from the 17th to the 21st Century*, ed. Richard Crangle, Mervyn Heard, and Ine van Dooren (London: The Magic Lantern Society, 2005), 211–13; Mark Butterworth, "The Brenograph in Action," *The New Magic Lantern Journal* 10, no. 2 (2006): 19–22; and Thomas J. Mathiesen, *"Projects Everything but the Picture": The Brenograph and the Brenkert Light Projection Company*, 2017, http://fwembassytheatre.org/wpcontent/uploads/2016/11/Complete_booklet_web.pdf.

four slide carriers and an astonishing array of slides and accessories: "Song-Hit" slides incorporating scenes from movies (for instance, "Where is the Song of Songs for Me?" slides featuring Lupe Velez in Griffith's 1929 romantic drama, *Lady of the Pavements*); large Workstel "E-Fect plates," pairs of positive and negative dissolving slides (black and white and color); glass slides with abstract patterns; adjustable iris shutter slides (rectangle, circle, star); mechanized scenic effects slides ("Clouds with Rising Moon," "Cyclone with Flying Objects," "Inferno Spectacular Effect"); panorama train, countryside, and cityscape slides; Lobsterscopes for projecting stroboscopic effects onto dancers; and clockwork driven color wheels and gelatin color holders for use in conjunction with any and all of the above. There were even mask slides for projecting onto the proscenium arch, allowing the films or lantern slides to be "framed" by colorful lighting effects throughout projection.

Returning to the third window in the Avalon, we are suddenly able to imagine the lantern playing a much larger role than previously understood.[23] Rather than merely producing "Brenograph displays" between presentations, it participated in every programmatic element of the film show: it decorated the draw curtains and proscenium with color effects, furnished scenic effects for the musical overture, created lighting effects for the presentation acts, projected song slides for the organ solos, displayed framing effects for films, and produced the clouds and

[23] See William Paul, *When Movies Were Theater: Architecture, Exhibition, and the Evolution of American Film* (New York: Columbia University Press, 2016), a study of theater architecture and its influence on motion picture exhibition in which the lantern gets overlooked. Cf. Esther M. Morgan-Ellis, *Everybody Sing! Community Singing in the American Picture Palace* (Athens: University of Georgia Press, 2018), in which the lantern features prominently in the discussion of picture palace community singing.

auroras on the sky. Coupled with the architecture, the lantern was an omnipresent aspect of the late-silent era film show. Indeed, one could argue convincingly that it provided the atmosphere in the Atmospheric Theatre.

What are the implications of such a claim? For early cinema scholars, the lantern's presence in the silent era is perhaps akin to that of sound, as a determining factor whose importance lies in its absence.[24] For media historians, it offers a valuable historical precedent for understanding today's media networks, environments, and transmedia practices. And for lanternologists, it shows the lantern's ongoing dynamics of superposition and reciprocity: the superposition of such practices as dissolving views, illustrated songs, and electric lighting effects, and the reciprocity between the lantern and motion pictures, vaudeville, and the atmospheric theatre. At this time of growing interest in the lantern, this lanternological perspective can serve as a helpful guide for future inquiries. For if, along with early cinema and other new media c. 1900, the lantern offers a number of "roads not taken," the ones we choose to take will make all the difference. [25]

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[24] See Thomas Elsaesser, "Early Film History and Multi-Media: An Archaeology of Possible Futures?," in *New Media, Old Media: A History and Theory Reader*, ed. Wendy Hui Kyong Chun and Thomas Keenan (New York: Routledge, 2006), 21. Elsaesser has called this condition "the dog that did not bark," after the well-known Sherlock Holmes story, "The Adventures of Silver Blaze," in which Holmes deduces that the significance of the dog's silence during the burglary is that the dog knew the burglar well—and thus did not bark.

[25] Tom Gunning, "An Unseen Energy Swallows Space: The Space in Early Film and its Relation to American Avant-Garde Film," in *Film Before Griffith*, ed. John L. Fell (Berkeley: University of California Press, 1983), 366.

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