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MOVING WORDS/MOTION PICTURES:

PROTO-CINEMATIC NARRATIVE IN

NINETEENTH-CENTURY BRITISH FICTION

by

Kara Marie Manning

A Dissertation
Submitted to the Graduate School
and the Department of English
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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ABSTRACT

MOVING WORDS/MOTION PICTURES:

PROTO-CINEMATIC NARRATIVE IN

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by Kara Marie Manning

December 2016

In the broadest sense, this project is about nineteenth-century narrative texts and optical toys, or those devices that were originally created to demonstrate scientific knowledge related to vision but that would also become popular for home and public consumption. I argue that nineteenth-century British writers borrowed and adapted the visual effects of such toys, making fiction as participatory as the toys themselves in the development of image culture and the viewing practices that would become necessary for the production and dissemination of cinema in the early twentieth century. Narrative fiction, then, should be considered along with the other precursors of filmic technology as a form of the proto-cinematic, a term I use as media scholars do—to describe devices integral to film history but that also each had a cultural impact in its own unique way.

To demonstrate and support this argument, my project first introduces readers to a range of proto-cinematic technologies, toys that were important during the nineteenth century, and establishes these as a lens through which we might read Victorian narratives. The subsequent chapters offer close readings that delineate my proposed methodology; texts include Dickens's *Nicholas Nickleby*, Brontë's *Wuthering Heights*, Lewis Carroll's Alice books, and Sir Arthur Conan Doyle's Sherlock Holmes stories.

ACKNOWLEDGMENTS

This project began to germinate in the summer of 2010 when I had the good fortune to study abroad in London with Dr. Jameela Lares, to whom I'd first like to express my thanks. The children's literature course I took with Dr. Lares that summer long ago resulted in a paper about Lewis Carroll's Alice books, the shifting interest the books reveal about moving images, and Tim Burton's then-recent *Alice* film. Encouraged by Dr. Lares, I sought publication and eventually found it with *Neo-Victorian Studies* (*NVS*) in 2011. I must therefore also acknowledge that portions of Chapters I and IV of the current project first appeared in an earlier form in my essay "That's the Effect of Living Backwards': Technological Change, Lewis Carroll's Alice Books, and Tim Burton's *Alice in Wonderland*," which was included in a special issue of *NVS* titled "Spectacles and Things: Visual and Material Culture and/in Neo-Victorianism (volume 4, issue 2). Thanks to *NVS* General Editor, Marie-Luise Kohlke, for allowing contributors to reuse their work, in part or in full, after twelve months.

I must also express my gratitude to the director and staff of the Bill Douglas

Cinema Museum, housed at the University of Exeter. In the summer of 2011, another

bout of good fortune allowed me to conduct archival research for my dissertation at the

Museum, which was then called the Bill Douglas Centre for the History of Cinema and

Popular Culture. The assistance I received aided me in navigating the massive collections

and helped me to gain imperative first-hand experience with a number of proto-cinematic

apparatus, including kaleidoscopes, stereoscopes, flip books, and magic lantern slides.

I'm so grateful I was able to learn a great deal not only about optical toys, but also about
the process of conducting research of an archival and material nature.

Of course, this dissertation would not have been completed without the cooperation of my committee members, and I have broken with the custom of thanking them first only to take a more chronological approach to the many acknowledgments demanded by a project of such long gestation. I wish to convey my sincere appreciation to my committee chair, Dr. Eric Tribunella: I thank you for your endless patience, for your helpful feedback, and for your continued guidance at all stages of this process. Your willingness to read, discuss, and champion my work even when I was floundering in it has meant so much to me. Many thanks are also due to the other members of my committee: Drs. Monika Gehlawat, Phillip Gentile, Nicolle Jordan, and Alexandra Valint, I am so pleased that you all contributed to my project, and I am obliged for your support and encouragement over the past several years. Your generous suggestions and commentary have challenged me to bring this project to its final form.

There are so many friends and colleagues, old and new, near and far, that I must also acknowledge, though I trust they already know how deeply I value their diverse roles in my life and in the life of this project. Nevertheless, to Alli, Allison, Bryan, Charles, Greg, James, Jeanne, Jen, Jolene, Jon, Molly, Nicole, Paige, Sarah, Stephanie, Tanja, Trevor: thank you for the constant (if sometimes distant) succor. Your words—in person, via text, on the phone—have been such a help to me. And to my recently acquired colleagues and students at Schenectady County Community College: I am so appreciative of the ongoing support I have received at SCCC over the last year, and I am so glad to be working among you all. Finally, the members of my family deserve ample gratitude: your love encourages, inspires, and motivates me. Always. Turn the page.

DEDICATION

For my parents and my sister, who have always cultivated my curiosity, inspired my vision, and supported my every move.

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CHAPTER I – LIVING IN CINEMA:

RE/ASSESSING THE RELATIONSHIP BETWEEN

MOTION PICTURE TECHNOLOGY AND

NINETEENTH-CENTURY NARRATIVE FICTION

I slept indeed, but I was disturbed by the wildest dreams. I thought I saw Elizabeth, in the bloom of health, walking in the streets of Ingolstadt. Delighted and surprised, I embraced her; but as I imprinted the first kiss on her lips, they became livid with the hue of death; her features appeared to change, and I thought that I held the corpse of my dead mother in my arms; a shroud enveloped her form, and I saw the graveworms crawling in the folds of the flannel. I started from my sleep with horror . . . when, by the dim and yellow light of the moon, as it forced its way through the window-shutters, I beheld the wretch—the miserable monster whom I had created. He held up the curtain of the bed; and his eyes, if eyes they must be called, were fixed on me. . . . Oh! No mortal could support the horror of that countenance. . . . [W]hen those muscles and joints were rendered capable of motion, it became a thing such as even Dante could not have conceived.

—Mary Shelley (1818, 1831)¹

Monsters and Magic Lanterns

The moment when Victor Frankenstein "infuse[s] a spark of being into the lifeless thing" he has created is one of the most globally recognizable narrative events ever recorded in prose—or in picture (Shelley 38). It is also very likely one of the literary moments most tainted by subsequent cinematic renderings: visions of Boris Karloff's iconic 1931 portrayal of an industrial monster whose parts are not only stitched, but also bolted together or of Robert De Niro's 1994 role as a more sympathetic, humanized version of the creature are difficult to contain and dispel when considering Shelley's text. Numerous and frequent motion picture adaptations of the novel have tended to warp our

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¹ Mary Shelley, *Frankenstein* 39-40.

relationship to the original narrative; we forget the poignantly described aftermath of the creature's birth, as excerpted in the epigraph above.²

For literature scholars and teachers, it can be frustrating to navigate the ways in which visual adaptations of fiction impact our reading and recollection of an original text. Despite my own best efforts, for instance, I often find myself guilty of misremembering narrative moments in the works of Shelley and others because my mind's eye sees instead a version of the text adapted to the screen (whether for film, for television, or even for other visual media such as video games). Just as we live in a time when the implications of Freudian thought, Marxism, and other massively influential theories continue to assert social and academic sway, so too are the ongoing ramifications of living with cinema and its offshoots ever present. In an effort to recontextualize how we read (and potentially teach) nineteenth-century literature and adaptations, I want to embrace what I suggest are the inherent, proto-cinematic qualities of the period's narrative fiction.

The patenting of the Lumière brothers' Cinématographe in 1895 ushered us fully into what Walter Benjamin has so famously referred to as the age of mechanical reproduction and, perhaps arguably, initiated a mainstream preference for, or even more broadly a cultural tendency to privilege (or to remember), narrative film over narrative literature.³ In the decades leading to the institutionalization of cinema as we know it, however, the dominant form of mechanically reproducible narrative was most certainly

² Visual adaptations of Shelley's work have clearly shaped the public imagination and permeated the manner in which readers recall or first approach the text. This phenomenon is most obvious, for example, when students (or others) who have not read the original narrative conflate Frankenstein with his creation, describe the creature as green, and/or assume hunchbacked Igor has always been part of the story.

³ See Benjamin's seminal essay "Work of Art in the Age of Mechanical Reproduction."

the novel, and this literary form played a significant role in the evolution of visual technology. In selecting a name for their machine, the Lumière brothers themselves seem to have acknowledged a connection between written media and the moving images their device could capture, project, and disseminate. The *Oxford English Dictionary* reminds us that the Greek roots of "cinematograph" might be translated loosely as "written movement" or "moving writing." The many cinematic reproductions of *Frankenstein*, while potentially disrupting readers' relationships with or understandings of Shelley's novel, also invite inquiry into how the original text encourages or even demands motion picture adaptation and, more importantly, how the text reflects earlier modes of image production.

In many ways, the scene excerpted above anticipates filmic qualities in that it conveys a sequence of carefully composed "shots" that lend themselves to screen adaptation and cinematographic techniques. The passage reads like a storyboard, depicting, for example, mise en scène, as well as a number of viewing angles, lighting methods, and special effects. These narrative strategies not only look ahead to movie making, but they also reflect a more contemporaneous engagement with earlier modes of image/visual production, such as magic lantern shows, live theatre, and photography. Shelley's text emphasizes sight and the emotive effect of optical illusion. Having immediately turned his back on the product of his labors, Frankenstein experiences a horrific nightmare in which the outcome of his experiment is reversed: his affectionate gestures turn life to death and conflate the two women he loves most. With his kiss Elizabeth's youthful lips and form "appeared to change," phantasmagorically morphing into the mother's shrouded and worm-riddled corpse. The dream's illusory nature is

further punctuated by the twice occurring "I thought," as Frankenstein's senses of sight and touch are tricked. Upon waking, Frankenstein perceives his creation illuminated by the moonlight projecting through the shutters; he observes himself being watched by the monster, who peeps beneath the bed curtain as though gazing into an audience (here consisting of a single, terrified member) from a dimly lit stage or, perhaps, fixing a subject through the eye-like lens of a shrouded photographic apparatus. The face and its features are terrible, but it is the animation and mobility of the creature, that it is "capable of motion," which seems to utterly horrify Frankenstein and, indeed, spur him to move himself: "one hand was stretched out, seemingly to detain me, but I escaped, and rushed down stairs. I took refuge in the courtyard . . . where I remained during the rest of the night, walking up and down in the greatest agitation" (Shelley 40). As the creature reaches toward his captivated-though-disgusted creator, simultaneously calling to mind the startling and unsettling effects of stereoscopic three-dimensionality and phantasmagoric magic lantern techniques, Frankenstein bolts to safety. It is certainly possible to glean from all of this the inspiration for now-familiar cinematic tropes of mad scientist and machinal creation.

The text does more than offer dramatic events and characterizations worthy of visual representation or adaptation. Shelley's original narrative engages in a form of media adaptation in its own right, from the visual to the textual. That is, Shelley's diction approximates the effects of visual spectacles produced by proto-cinematic technologies like the magic lantern; her text creates linguistic representations of visual media techniques and optical illusions that were becoming increasingly familiar to the nineteenth-century public eye. Over the course of the century audiences were exposed to

a growing array of early filmic devices that produced a variety of visual effects and brought about cultural shifts in modes of seeing and processing visual media. I suggest that nineteenth-century narrative fiction, like *Frankenstein*, reveals how writers grappled with the influence of this changing and expanding image culture by developing narrative techniques that blurred the line between visual and textual media. Shelley's contemporary audience, for instance, would have been attuned to the ways in which the previously discussed scene invites comparison with the magic lantern and its effects.

The magic lantern was developed in the mid-seventeenth century for projection purposes; using a light source and concave lens the boxlike apparatus could enlarge and cast images onto a wall, curtain, or screen. While magic lanterns were frequently used for educational lectures (much like A/V projection equipment today), they were also integral to popular theatrical spectacles that featured projected images painted on glass paired with sound effects and/or an oral performance by the lanternist. More than a century before Shelley composed Frankenstein during the famous 1816 trip to Lake Geneva and before Lackington, Hughes, Harding, Mavor, and Jones published it in 1818, audiences were treated to elaborate magic lantern shows, some of which included the projection of moving images. As Grahame Smith asserts, "[t]here is ample evidence that through displaying his show in the streets or in people's homes the travelling lanternist exposed significant numbers of people to the wonders of visual technology. Skilled operators were able to create the illusion of movement for their audiences at least as early as 1713" (Dickens 23). Skill certainly was required of the lanternist, whose job was quite complicated and interactive; changing the various slides and lens effects required a deft hand. Meanwhile, many lanternists were also vocally performing in some way, to provide

narration or even sound effects. By the late eighteenth century, a particular genre of magic lantern show, the Phantasmagoria, became wildly popular for the ways in which it surprised viewers with new techniques for establishing mood and projecting images. Noted film historian Tom Gunning explains that "[t]he innovations the Phantasmagoria brought to the traditional lantern show heightened the impact of these images" ("We are Here" 58). Newly developed techniques "included a dramatic use of darkness; concealing the lantern from view behind the screen by using back projection; [and] devising a lantern which could project three-dimensional objects, such as a carved skeleton, as images onto a screen" (Gunning, "We are Here" 58). Lanternists utilized clever methods for creating a spooky ambience and for immersing audiences into the spectacle. The Oz-like man (and machine) behind the curtain could be forgotten, thereby encouraging viewers to suspend their disbelief and drawing them more fully into the illusions of the show. Gunning goes on to suggest that innovations in creating illusions of movement had a significant impact on viewers: "most powerfully, a mobile lantern whose smooth approach to or withdrawal from the screen caused an enlarged or reduced image to appear to suddenly rush, or retreat from, the audience. This effect of emergence terrified spectators" ("We are Here" 58). Part of the lanternist's already complex job, then, was to physically move the apparatus in order to achieve impressive effects of projected images in motion.⁴ Despite the lengthy history of magic lantern spectacles—and the institutionalization of the device itself—the addition of gothic atmospheric qualities and subject matter of the

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⁴ A number of individuals and organizations continue the tradition of these spectacles by offering public magic lantern shows, many videos of which are also available online (see, for instance, "Magic Lantern Shows" and/or the results of searching the same phrase on *YouTube*).

Phantasmagoria shows, as well as improvements in constructing illusions of movement and proximity, packed a novel and emotive punch for viewers (Figure 1).

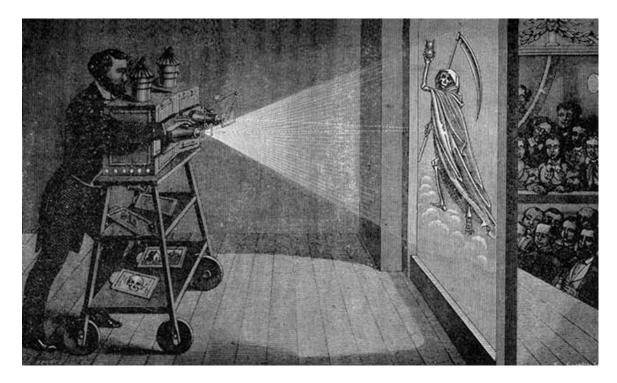


Figure 1. Phantasmagoria.

Depiction of lanternist using back projection with a pair of magic lanterns to astonish his audience. Image originally appeared in *Instructions pratiques sur l'emploi des appareils de projection: lanternes magiques, fantasmagories, polyoramas, appareils pour l'enseignement et pour les agrandissements* by A. Molteni (n.d.) on page 223. Retrieved from Weynants's *Early Visual Media*.

During the nineteenth century, when distinctions between media were in the process of forming, the experience of witnessing a Phantasmagoria spectacle would not have been wholly unlike reading the scene from *Frankenstein* included above, with its emphasis on optical illusions, projected visions, and unexpected motions. Shelley's narrative notably situates readers in a comparable way to viewers of Figure 1. Outside of the action, we might imagine Frankenstein screened off in his bed projecting to us both his dream and his waking horror at the monster on the other side of the curtain. Frankenstein simultaneously occupies roles as lanternist and audience member terrified

by his own created spectacle, particularly (to borrow again Gunning's phrase) that "effect of emergence" he perceives when his creature moves and reaches toward him, which he finds so abhorrent and conveys to readers. Indeed, Frankenstein's dream and the following encounter with the monster are narrated in terms that are extraordinarily similar to contemporary written accounts of Phantasmagoria. Scottish philosopher, scientist, and inventor Sir David Brewster, for example, relates the viewing experience and effects of a Phantasmagoria show in a letter to Sir Walter Scott in 1832:

[T]he head of Dr. Franklin was transformed into a skull; figures which retired with the freshness of life came back in the form of skeletons, and the retiring skeletons returned in the drapery of flesh and blood. The exhibition of these transmutations was followed by spectres, skeletons, and terrific figures, which, instead of receding and vanishing as before, suddenly advanced upon the spectators, becoming larger as they approached them, and finally vanished by appearing to sink into the ground. The effect of this part of the exhibition was naturally the most impressive. The spectators were not only surprised but agitated, and many of them were of the opinion that they could have touched the figures. (81-82)

It is interesting to note the similarity of names, "Dr. Franklin" and Frankenstein, but more importantly, Brewster's account almost replicates the language of Shelley's text. On the one hand, Brewster simply describes what he saw. On the other hand, however, his diction, like Shelley's, linguistically adapts the illusory experience of the spectacle. The transformation of Elizabeth's youthful figure, with a "freshness of life" like the images Brewster saw, into the deteriorating corpse of Frankenstein's mother is analogous to the

"transmutations" depicted during the Phantasmagoria. Additionally, the abrupt appearance of "spectres, skeletons, and terrific figures" is akin to Frankenstein's waking perception of his creation, which clearly terrifies him. The creature's looming presence and reaching hand seem to "suddenly advance" on and "become larger" to Frankenstein, just as the projected figures did for Brewster. Of course, the creature does not "sink into the ground" and out of sight, but Frankenstein's hasty retreat *down* to the courtyard completes for readers this phantasmagoric textual spectacle. Like the audience members Brewster describes, Frankenstein is "agitated" and disturbed by the near-tangibility of his creation. The potential for physical contact as initiated by the creature's own kinetic energy distresses Frankenstein so much that he spends the remainder of his night "in the greatest agitation" (Shelley 40). Shelley's readers, perhaps, also experienced such effects as they encountered this narrative moment, which was not revised for the third edition of the novel, published in 1831, just a year before Brewster's account.

It is impossible to know whether Shelley intentionally constructed this scene to evoke the Phantasmagoria or whether Brewster consciously emulated Shelley as he produced his letter to Scott. Equally evasive is confirming whether the magic lanternist had been influenced by *Frankenstein* or other works. What is evident, however, is that an interactive relationship exists between nineteenth-century narrative fiction and popular visual spectacles. Perhaps it is tempting to assume that a Phantasmagoria show like the one Brewster describes was simply an early form of page-to-screen adaptation, that the magic lanternist developed his spectacle in response to literature. This line of thinking seems natural in the twenty-first century, since we are bombarded by such adaptations (of *Frankenstein* and of so many other texts). And, of course, literature *was* quickly and

frequently adapted to visual and performative media; paintings and illustrations, as well as theatrical versions of narratives abound.⁵ While it is certainly true that texts provided fodder for visual adaptation during (and after) the nineteenth century, my primary interest is in the opposite trajectory. That is, my work explores the point of connection between textuality and visuality in terms of how nineteenth-century narrative fiction adopted and adapted emerging technologies of image production and contributed to new modes of seeing.

Focusing on technologies that predate cinema, I argue that nineteenth-century writers display a clear engagement with optical devices and the illusions they produced. In other words, as I have been suggesting here regarding *Frankenstein* and the magic lantern, the visual and sensory effects of proto-cinematic technologies influenced writers who, consciously or not, developed narrative techniques to generate similar experiences linguistically. The fiction produced during the nineteenth century, I contend, is marked by "moving" words that emulate and evoke the physical and mental effects created by visual media. These moving words reflect cultural anxieties over shifting modes of seeing but simultaneously served to normalize illusory experiences and new viewing practices. That is, fiction demonstrates adaptation not only in the sense that writers modified visual effects to text, but also in that writers and readers were becoming adjusted to a culture of visuality that was rapidly changing and expanding. Even as it borrowed from an evolving corpus of apparatus designed to create illusions, capture images, produce depth, and/or project movement, fiction contributed to the continued development of visual media.

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⁵ For instance, playwright Richard Brinsley Peake had already adapted Shelley's text for the stage by 1823. *Presumption: or the Fate of Frankenstein* ran at the English Opera House in London (see Butler xlix).

Nineteenth-century fiction thus functioned as a category of proto-cinematic apparatus itself, occupying a place on the spectrum of visual technology and image production that helped to shape Victorian modes of seeing and pave the way for the emergence of institutionalized cinema as we know it.

Contextualizing Victorian Modes of Seeing

Broadly conceived, my work is situated among studies that offer approaches to understanding nineteenth-century modes of seeing and interpretations of vision through socio-political, cultural, and technological lenses. Chris Otter's *The Victorian Eye: A* Political History of Light and Vision in Britain, 1800-1910 informs my methodology, for example, since it interrogates the socio-economic and political effects of the use of gaslight and other technologies in architecture and urban planning. As Otter suggests, "[l]ate-nineteenth-century Britain was increasingly traversed and knitted together by technologies that, if they failed, would wreak social, economic, and medical calamity" (262). Visual technologies were part and parcel of a larger web of developments that allowed the country to run smoothly, and I argue that the nexus between the technological and the literary is worth investigating for the evolving role it played within a wider socio-political infrastructure to both preserve and modify modes of seeing. Rather than focusing on physical spaces, as Otter does, my work draws on fictional narratives as sites in which we can also discover "a multiplicity of overlapping, intersecting, and contrasting perceptual 'patterns' that recur throughout the nineteenth century" (Otter 21). In closely readings several exemplary nineteenth-century texts, I explore how proto-cinematic technologies are narrated across the nineteenth century and into the twentieth, and I investigate how these narratives—on the brink of cinema—affect and are affected by visual science and technology. Ultimately, my aim is to resituate our understanding of the technological roots of cinema in such a way that includes fiction as a proto-cinematic apparatus in its own right.

In addition to Otter's work, I draw on Kate Flint's foundational study, *The* Victorians and the Visual Imagination, which investigates a "society [that] was characterised not just by the accelerated expansion of diverse opportunities for differing sorts of spectatorship, but by a growing concern with the very practice of looking, and with the problematisation of that crucial instrument, the human eye" (2). This interdisciplinary examination of blindness, hallucination, memory, and other aspects related to sight (or the lack thereof) occurs in relation to texts by Charles Dickens, George Eliot, Rudyard Kipling, and others, as well as to engravings and paintings by artists such as the members of the pre-Raphaelite brotherhood and J.M.W. Turner. Flint's work focuses on how Victorian attitudes toward seeing were depicted in and altered by both text and image, revealing a culture that was troubled by, but nevertheless invested in "the process of seeing" and demonstrating that "visuality was crucial to Victorian debates about the place of the individual in the world" (311). Flint remarks that "Victorians were fascinated with the technology of vision" both internal (the human eye itself) and external (the array of devices that modified sight), but the only forms of proto-cinematic technology that she addresses—and these very briefly—are the magic lantern and photography (311). Flint's comprehensive study thus undergirds my discussion of the relationship between fiction and more specific proto-cinematic technologies.

My approach to reading fiction in relation to proto-cinematic technologies includes conceptualizing how such technologies come to be. In suggesting caution in

using the term "early cinema," film scholars Nicolas Dulac, André Gaudreault, and Santiago Hidalgo point to the implication of "a false sense of determinism between earlier practices . . . and cinema, as if these inevitably converged to give rise to this new technology, which erases them as soon as it establishes itself as a 'new beginning'" (2). While from our current point of view cinema may have seemed inevitable, its eventual development and popularity consisted of quite a complicated process. Brian Winston's 1996 volume Technologies of Seeing: Photography, Cinema and Television offers a comprehensive exploration of how apparatus evolve. Winston suggests that societies possess agency over the use and spread of innovations and, therefore, implies the need to engage in cultural analysis to understand the societal impetus for the advancement and deployment—or the disappearance—of specific technologies: "The state of the market, or better, of society is the crucial factor in enabling the development and diffusion of any communications technology or in hindering it. That is as true of the computer chip and the Internet as it was of the telegraph and the telephone. Thus, innovations are the creatures of society in a general sense" (3). Like Dulac, Gaudreault, and Hidalgo, Winston argues against technological determinism, or "the commonly held assumption . . that it is the technologist who has control of the pedals" of progress, offers a model that is useful for analyzing a recurring pattern of socially-driven technological change (1). Because his work has served as an important influence on my own, I outline Winston's model in some detail, as well as the manner in which he applies that model to the development of cinema, an innovation that technologically could have been developed and diffused much earlier than it actually was.

In his own way asserting a connection between language and visual technology, Winston works from a modified version of the Saussurean model of linguistics and suggests that "[t]echnology is a performance of a competence arising from science (or knowledge)" and that "[a] technology moves from inchoate scientific knowledge (which itself is conditioned by society) to wide diffusion in society via a number of transformations" (4). An initial prototypical device must be generally recognized as somehow useful prior to its transformation into an invention that may then be widely diffused. This diffusion, however, "is conditioned by a social brake[,] not an accelerator. New technologies are constrained and diffused only insofar as their potential for radical disruption is contained or suppressed" (Winston 7). For Winston, the development and diffusion of technologies, particularly communications or visual technologies, occurs within and is controlled by the social sphere. Society in general (rather than just those individuals involved in the physical construction of new devices) is responsible for furthering or delaying technological progress. A "supervening social necessity" transforms a prototype into an invention, and a socially-directed "suppression of radical potential" accompanies the diffusion of a specific technology so as to avoid disruptive or fatal consequences to other longstanding institutions (Winston 6, 7).

In applying this methodology to the complex realities of the nineteenth century, Winston points out that all of the mechanical components and chemical competence needed to produce motion picture technology were available as early as 1864: "[T]he projector and the photographic camera and the flexible film as well as a slough of different devices producing the illusion of movement" had been successfully developed and diffused long before the supervening social necessity led to an attempt— or, indeed,

a demand—to combine the individual technologies (Winston 13). The social necessity, Winston asserts, was slow in coming, because "[t]he real issue of the day was not creating the illusion of movement but rather using the camera as a scientific instrument to stop motion" (13). The Victorians, according to Winston, were most fascinated by the camera's ability to pause life, to capture a still image of a moment in time that might then be saved, studied, and scrutinized. But the supervening social necessity would eventually arise, and I suggest that fiction and the ways it employed proto-cinematic narrative was an important element in the process that Winston does not address. Winston argues that the supervening social necessity grew out of three interrelated contexts that had each evolved throughout British history: the aesthetic taste for realism, the performative tendency toward narrative, and the rapid growth of a mass audience. During the nineteenth century, these three contexts merged in the physical sites of the theatre and music hall, where audiences were steadily being prepared for the cinema and trained to desire its development:

[B]y 1895, the broad mass of the audience, addicted to naturalistic illusion and narratives, was sitting in the darkened seats of the auditorium watching highly professional entertainments created by logistically complex, capital-intensive, if somewhat risky, industry. Both the producers and the consumers of this product were waiting for the cinema. (Winston 31)

The mass audiences that flocked to the ever-industrializing theatres and music halls were consuming not only traditional live action performances, but also other forms of spectacle and visual entertainment that relied on technological innovation. Such displays included

magic lantern shows as previously discussed, as well as panoramas and dioramas, which incorporated visual and aural elements already familiar to theatre-goers. 6 Thus, the stage was (almost literally) set for the transformation of many and various cinematic prototypes into the "invention" of a device capable of creating and projecting motion pictures. The Lumière brothers were not alone in acting upon the social impetus for a motion picture technology, as many individuals strove to build such systems. Once developed, these devices quickly began to diffuse, which led to the final stage of Winston's model. The suppression of radical potential, in the case of cinema, essentially consisted of a number of patent acts, standardization requirements, and exhibition laws that all worked to control and limit the production and screening of motion pictures. The effect of these suppressive tactics was, perhaps unsurprisingly, the preservation of the stage during a crucial moment when the public impulse may well have been to disregard it entirely in favor of movie-going: "the radical potential of the cinema to destroy the theatre was contained" (Winston 37). Winston's model, thus applied to nineteenth-century technologies of seeing, accounts for a generally uncommented upon delay in the development and diffusion of the cinema, a delay during which many writers, including Mary Shelley, absorbed other and equally influential (though perhaps not as potentially disruptive) forms of visual media.

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⁶ The panorama consisted of very large, scenic paintings that moved around a seated audience. Sound and lighting effects may have accompanied such entertainments, but the diorama used such effects in a more sophisticated way: "Here the audience was transported before a scene in which there was movement and elaborate light changes as well as music, sound effects and commentary and, in the foreground, real objects like models of chalets and fir trees to give depth to the image of, say, Mont Blanc behind" (Winston 24).

The influence of such media, as I suggested earlier, can be found lurking in fictional narratives, which may be read as an additional site that helped generate Winston's notion of a supervening social necessity for moving pictures. What I am calling proto-cinematic narrative, in other words, contributed to the desire for and dissemination of filmic technologies by encouraging readers to become viewers. At the same time, however, proto-cinematic narrative functioned as a suppressive tactic that helped to preserve continued interest in and desire for textual narrative. Moments of the proto-cinematic in fiction emphasize visuality, what is seen and how it is seen, and often present narratively coded images that surprise readers with illusion, distortion, or motion. As in *Frankenstein*, for example, Shelley's description of what Victor sees during his dream and afterward produces an experience similar to the effects of a phantasmagoric magic lantern show. Reading the novel in terms of proto-cinema allows for new interpretive treatments that shed light on the importance of visual culture and technology during the nineteenth century. Significantly, Shelley's story is about bringing the dead/still to life/motion and the potential disruptions of animating the inanimate, thus highlighting the tensions surrounding visual media that would continue to affect writers and readers throughout the period as new technologies and image categories emerged.

Contextualizing Motion Picture Technology

As previously mentioned, the Lumière brothers introduced their Cinématographe in France in 1895, which has long been considered a landmark moment for visual technology. The nineteenth century saw many important advances in the scientific knowledge of the human eye and its functioning, however, and these advances both relied on and led to a number of equally important developments in technological apparatus

related to vision. Building on the basic tenets of optics, light waves, and color vision theorized and documented during the seventeenth and eighteenth centuries, nineteenth-century scientists began to uncover a far more complex anatomical geography of the eye and its physiological relationship with the brain. Improved preservation techniques allowed scientists to penetrate and study the organs of sight, and the advent of increasingly more powerful microscopes simultaneously aided in the scrutiny of previously unseen structures within the eye and the optic nerve. As nineteenth-century scientists such as Thomas Young, Sir David Brewster, and Sir Charles Wheatstone came to better understand the sophisticated internal workings of the eye, they sought the means to illustrate their findings in ways that would inform both their colleagues and the general public.

Written treatises and public lectures were common modes of circulating newly discovered knowledge, of course, but many scientists also developed physical devices that demonstrated the visual phenomena they sought to explain. The same Brewster who described the Phantasmagoria, for instance, developed the kaleidoscope in 1815 to demonstrate the principles of light polarization and multiple reflection. Similarly, John Aryton Paris, a British physician and medical researcher, is often credited with the development of the thaumatrope, a simple device that he used during an 1824 talk given at the Royal College of Physicians to illustrate persistence of vision, the phenomenon by which separate images can seem to overlap and become one—and by which sequences of still images can appear to move. Originally conceived as scientific tools and visual aids to scientific discourse, these and a host of other prototypical devices took a firm hold on the popular imagination, became widely diffused, and were categorically referred to as

optical (sometimes philosophical) toys. By mid-century, optical toys were a standard fixture in many households, delighting and educating adults and children alike. From thaumatropes that blended two separate images into one to zoetropes that created the illusion of movement from several individual still images, a diverse array of visual devices were available to dazzle the eyes of the Victorians, as well as to instruct them in the scientific knowledge of vision.

Optical toys—along with the photographic camera, which made its debut in 1826—were the physical precursors to the motion picture technologies that have often been privileged as groundbreaking and superior, such as the Cinématographe. In the last few decades, film historians and media scholars have sought to reclaim optical toys and photography as subjects for serious academic scrutiny, acknowledging the important roles they played individually and collectively during the nineteenth century, as well as more recently in the development of cinema and other forms of visual delivery systems and technologies, such as television, the Internet, and videogames. In a recent essay titled "Motion Picture Media and Modernity: Taking Intermediate and Ephemeral Forms Seriously," for instance, Ian Christie takes issue with the notion of ephemeral or "dead media" and assertions that such media no longer bear relevance to contemporary modes of seeing. Christie argues, instead, that an "ensemble of visual media" is ever-present and is constantly being repurposed or upgraded (301). This ensemble of media has received a great deal of attention in recent years; an impressive corpus of academic writing attempts to reconceptualize our understanding of the material practices and representational purposes of visual apparatus. Recent essay collections investigate, for instance, the ongoing significance of a spectrum of devices and media. The subtitle of Multimedia

Histories: From the Magic Lantern to the Internet (2007), edited by James Lyons and John Plunkett, reveals the broad range of scholarly interest in exploring the wide landscape of visual media. Many collections are also devoted solely to artifacts that contributed to film history. André Gaudreault, Nicolas Dulac, and Santiago Hidalgo's 2012 collection, A Companion to Early Cinema, contains a wealth of material that prioritizes our understanding of devices like the magic lantern and later technologies that preceded cinema. Gaudreault's own contribution to the collection elucidates how we might further categorize proto-cinematic technologies into "cultural series, each of which already had its own practices" (15, original emphasis). These cultural series, including photographic images, animated images, and projected images, eventually united to establish the motion picture industry. What makes a particular technology or device proto-cinematic, then, is that it had its own cultural significance yet also contributed to the "evolutionary process" of "Cinema's emergence" in ways that helped to shape the material possibilities of capturing and disseminating images, as well as the physiological readiness of spectators (Gaudreault 15).

It is important to note a point of contention among film historians and media scholars regarding terminology. Currently, scholars including André Gaudreault, Tom Gunning, and John Plunkett discourage the use of terms like "early cinema" and "precinematic"—phrasings that pejoratively suggests a primitive means to a preferred end—in favor of "proto-cinematic" forms and devices, implying manifestations of the motion picture that exist along an ever-evolving practical and social continuum. Similarly, I choose the term "proto-cinematic" to describe the ensemble of devices included in this project, which attempts to bridge the archaeological goals of film historians and media

scholars with the analytical goals of Victorian studies and literature scholars. In the following sections, I discuss a representative sample of particular forms and categories of nineteenth-century proto-cinematic technology in order to provide a heuristic framework for reading texts through the lens of optical toys and their effects.

The Thaumatrope and Persistence of Vision

In Tom Gunning's plenary address at the 2011 Annual Conference of the North American Victorian Studies Association, he invited the audience to consider contemporary visuality in relation to a category of image that emerged during the nineteenth century, a visual genre that emphasized the "creation of the illusion of movement" ("Hand and Eye: Inventing"). Gunning suggested that we look to the thaumatrope for a prime example of this genre, and he illustrated the physiological phenomenon known during the nineteenth century as persistence of vision and how such optical devices unite not only two distinct images, but also the hand and eye, verbal and visual, instruction and delight, manipulation and observation. In an expanded, published version of his lecture, Gunning claims that the thaumatrope's "relation to language, writing, and reading sink[s] deeply into its operation and its very identity, as it not only instructs but plays with the processes of language, asserting an odd relation to Victorian literature" ("Hand and Eye: Excavating" 502). The purpose of my project is to further elucidate this "odd relation to literature" in a way that draws on the thaumatrope and other optical toys as a methodology for reading texts.

A simple device, the thaumatrope—from the Greek for *wonder* and *to turn*—is a circular piece of card or pasteboard, featuring an image on each side, with strings attached so that it might be spun or twirled by the fingers, usually on the horizontal axis.

In the rapid spinning of the disc, the two images appear to combine, thus creating an optical illusion in which the separate pictures are merged. Two figures, for example, one on each side of the disc, unite in a dance, or an empty cage suddenly contains a bird or even a rat (see Figure 2).⁷

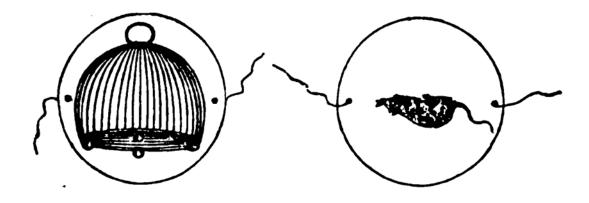


Figure 2. Thaumatrope design.

Image from Chapter XVIII of Paris's Philosophy in Sport Made Science in Earnest (339) as digitized by Google.

The originator of the thaumatrope is frequently debated, and a number of individuals have been credited with its earliest development, including Charles Babbage, Sir John Herschel, and William Fitton (Gunning, "Hand and Eye: Excavating" 498-99). However, it was British physician, medical researcher, and writer John Ayrton Paris who first relied on the device during an 1824 talk given at the Royal College of Physicians to explain the phenomenon of persistence of vision, whereby a visual impression or

⁷ The bird-and-cage motif was popular during the nineteenth century, but it also enjoyed a contemporary homage in Tim Burton's 1999 *Sleepy Hollow*. The film features the thaumatrope prominently (if anachronistically) as a characterizing and metaphoric plot device.

⁸ Archeological researchers have recently determined that ancient drawings on cave walls in present-day France, as well as double-sided depictions on Paleolithic bone objects, discovered in the Pyrenees, are precursors to the thaumatrope. See Lorenzi, whose article participates in the debate I mention: she credits Hershel with the invention of the thaumatrope in 1825.

afterimage remains on the retina of the eye for a short period of time and may subsequently become layered into or superimposed onto another object. The term "persistence of vision" seems not to have come into general use until the latter half of the nineteenth century, but a number of scientific minds were actively—and simultaneously—honing discursive treatments of the phenomenon. In December of the same year Paris gave his lecture, for example, Peter Mark Roget delivered his "Explanation of an Optical Deception in the Appearance of the Spokes of a Wheel Seen through Vertical Apertures" to the Royal Society of London. Having observed that a moving wheel's spokes appear curved when viewed through a Venetian blind, Roget discovers the cause of this trick of the eye:

The true principle, then, on which this phenomenon depends, is the same as that to which is referable the illusion that occurs when a bright object is wheeled rapidly round in a circle, giving rise to the appearance of a line of light throughout the whole circumference: namely, that an impression made by a pencil of rays on the retina, if sufficiently vivid, will remain for a certain time after the cause has ceased. (135)

The turning of Roget's carriage wheel and other frequently occurring events that give rise to this particular optical deception rely on the vivid impressions that persist in our vision.

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⁹ According to the *Oxford English Dictionary*, the first reference to "persistence of vision" did not appear in print until 1853 in Brande and Cauvin's *Dictionary of Science, Literature, and Art.* Significantly, the term is used in defining the word "thaumatrope," which the entry notes is "the name given by Dr. Paris to an optical toy, the principle of which depends on the *persistence* of vision" (qtd. in "Persistence," def. 2b, emphasis in original). The *OED* cites Paris's *Philosophy in Sport* (1827) as the first appearance of "thaumatrope."

Because it was portable, easily constructed, and allowed for a wide range of designs, the thaumatrope became a common illustrative tool, a visual aid to an ongoing scientific conversation regarding persistence of vision. The device is first mentioned by name in an unsigned piece in *The Edinburgh Journal of Science* from 1826, which credits Paris as the inventor of "a very ingenious philosophical toy" ("Description" 87). Indeed, Paris also seems to have recognized a growing societal interest in the device and was the first to popularize and market the thaumatrope in a variety of ways. The toy was widely and cheaply available in stationers' shops, and it makes a significant appearance in Philosophy in Sport Made Science in Earnest, Being an Attempt to Illustrate the First Principles of Natural Philosophy by the Aid of Popular Toys and Sports, an instructional novel Paris wrote for children and their parents. Initially published anonymously in three volumes in 1827, *Philosophy in Sport* attempts to engage readers in scientific principles by making the education enjoyable and exciting. An entire chapter of the third volume is devoted to the thaumatrope, the principle of which is described by Mr. Seymour, the head of a fictional family about which Paris writes. Mr. Seymour explains to his children and several household guests "that an object was seen by the eye, in consequence of its image being delineated on the retina, or optic nerve, which is situated on the back part of the eye; and that it had been ascertained, by experiment, that the impression which the mind thus receives, lasts for about the eighth part of a second, after the image is removed" (343-44). After exemplifying this principle with a stick ignited at one end and whirled quickly around, creating the effect of a continuous circle of light (as also discussed by Roget), Mr. Seymour goes on:

"Then you will not have any difficulty in explaining the action of the Thaumatrope, for it depends upon the same optical principle; the impression made on the retina by the image, which is delineated on one side of the card, is not erased before that which is painted on the opposite side is presented to the eye; and the consequence is, that you see both sides at once."

"Or, you might put it in this way," said the major: "that as the image remains the eighth of a second on the retina, after it has been withdrawn from the eye, a revolution of eight times in a second will secure its uninterrupted continuance." (345)

The science of vision has come a deal further since 1827—we now have a slightly better understanding of the relationship between the eyes and the brain, and we calculate the persistence of a retinal image at about one twenty-fifth of a second. As neurophysiologist Margaret Livingstone points out, "we don't have conscious access to that retinal image; our visual perception is available to us only after the brain has processed it into a three-dimensional representation" (101). Nevertheless, Paris's narrative describes the workings of the eye as reliant upon "impressions" that are received by "the mind," and such impressions are "not erased before" allowing us to "see both sides at once." The coordination of the eye and the mind, mediated via a mechanical technology, constitutes a kind of dream-like visual memory that lets us perceive the optical illusion created by the thaumatrope and similar devices. Major Snapwell's comment regarding the frequency of the thaumatrope's revolution explains how to achieve the best illusion for that device.

Gunning's assertions that we consider the thaumatrope as exemplary of a category of nineteenth-century moving image is important for understanding motion picture

history; nevertheless, it is necessary to slightly revise the role played by this device or, more accurately, to further distill the function and effect of the apparatus. Seemingly, the thaumatrope is a clear example of motion picture: the physical rotation of the disc literally makes the pictures move as they rotate into and out of view. It is significant, however, that the illusion created by the thaumatrope is not the illusion of movement; rather, the actual movement of the device creates the illusion of union, of visual continuity, of two pictures becoming one. There is a flicker effect as the edges of the disc blur into the image, but the combined image itself does not move. We experience a sort of doubled vision, in that two distinct entities become a simultaneously perceived possibility. It is also necessary to consider the construction of the device and the nature of the image on each side of the card: in order for the illusion to make sense to viewers, to be a possibility, one side of the disc must represent an inverted depiction so that when it is spun on the horizontal axis, both pictures appear right side up (as shown on the design in Figure 2 above). Each image must also lack something that is present in the other. The most effective illusions occur with images that rely on absence. A horse depicted mid-trot with saddle and bridle, for example, is missing its rider (or vice versa) until the mechanical action of the spinning unites the two partial images. Finally, when properly handled, the thaumatrope must spin first in one direction and then in the other due to the tension created on the strings, and the quality of the illusion largely depends on the momentum gained in the back and forth spinning; the faster one twirls the disc, the more solid the combined image appears, as Major Snapwell explains. Any movement perceived by the eye is not in the image per se, but in the flickering effect generated as the edges of the disc come into our line of sight. The thaumatrope thus established a

novel and interactive way of seeing and of understanding sight, but it also occupied a position alongside devices that produced static images, like the photographic camera. Photography and the Stereoscope

The photograph, the first of which was made in 1826 by Frenchman Nicephore Niépce (who called it a "heliograph"), became a world-renowned category of image when Louis Daguerre patented his process, daguerreotyping, in 1839. Through the 1830s and '40s, a number of Englishmen were also invested in establishing photographic processes and apparatus that would perfectly capture moments of real life. Henry Fox-Talbot, for instance, patented a process (calotype, also called talbotype) in 1841 by which a negative image was exposed and fixed, "then re-exposed against a second sheet of paper which had been treated with silver chloride. This sheet was then itself developed and fixed. The terms 'photography', 'positive' and 'negative' were all coined by Talbot's friend, the great astronomer Sir John Hershel, to describe the process and elements within it" (Winston 12). The photograph would later play an important role in the diffusion and commercialization of a proto-cinematic viewing device: the stereoscope. Similar to the thaumatrope, the stereoscope unites two images into one. Unlike the thaumatrope, however, which works based on persistence of vision, the stereoscope relies on binocular vision or the physiognomy by which each eye perceives an image that overlaps the other to produce our ability to perceive depth. With a stereoscope, two almost identical pictures—each taken from a slightly different point of view—could be viewed as a single, seemingly solid three-dimensional image.

Many of us will remember peeping into a red, plastic contraption as children, gazing with delight at three-dimensional Disney characters or exotic places and thumbing

an orange lever to mechanically turn a cardboard disc and bring the next image into view. The trademark name of this device, View-Master, conflates sight and image with power, simultaneously suggesting the superiority of the apparatus itself and attributing the individual viewer with an authority over or control of the depicted subject. The choice of name and the associations it calls to mind seem fitting given the development of the device in 1938 and the interest it generated for the United States military, who "were keen advocates of the View-Master and had specially commissioned sets of reels produced to aid with artillery spotting and aircraft identification during World War II" (Sawyers par. 3). The trademarked device changed hands several times and flourished in the 1950s and '60s. Currently, Fisher-Price owns the trademark and continues to market and sell a variety of View-Master designs and reels. A quick glance at the toy company's View-Master webpages reminds us that the device has been "reel' 3D fun for over 70" years!" ("View-Master"). The longevity and success of this particular device, as well as the upsurge in 3D film production and the increasing availability of virtual reality (VR) kits in recent years, imply that twenty-first century consumers are eager to experience immersive visual entertainments that allow us to feel present in, involved with, affected by, or in control of images, scenes, or characters. 10

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¹⁰ 3D is everywhere at the moment. I need not offer a lengthy list of films, as it seems most these days are being screened in that format. VR kits that allow viewers to feel as though they are experiencing an alternate three-dimensional space are currently on the market from a number of companies, including Google, Microsoft, Oculus, Sony, and Samsung. Indeed, there are so many varieties available at this point that Paul Lamkin recently reviewed "The Best VR Headsets."
Many of these headsets resemble stereoscopes, in fact; the Google Cardboard is a particularly interesting design in this regard. Additionally, the demand for 3D exists not only in entertainment contexts, but also for practical purposes, as evidenced by the rise of 3D printing (see Barnatt).

The View-Master is probably the most widely known stereoscopic device for contemporary readers and thus offers a familiar means of discussing its nineteenth-century original. The plastic contraption is in fact a slightly modified stereoscope repackaged and updated for twentieth-century Western consumption, education, and entertainment, thus demonstrating Christie's assertion that older media are frequently upgraded and repurposed. Perhaps not entirely coincidentally, the Victorian version of the device followed a similar timeline and pattern of dissemination. In "Fantasy, Photography, and the Marketplace: Oliver Wendell Holmes and the Stereoscope," Nancy M. West succinctly explains the apparatus:

Invented in 1832 by Sir Charles Wheatstone and refined by Sir David Brewster in 1848, the stereoscope created the first detailed illusion of three-dimensional space. Its operation was simple: a viewer slid a card containing two nearly identical photographs into the machine and by looking through its specially designed lenses, saw a single image that appeared to have depth. An abandoned oddity to us now, the instrument was one of the first universal means of visual communication before cinema and television. (231)

Clearly, the stereoscope is neither odd nor abandoned, as West claims, though its original use and design might indeed seem strange and unwieldy to us now. In his 1838 "Contributions to the Physiology of Vision," Wheatstone describes the instrument and coins the term "stereoscope" in order to "indicate its property of representing solid figures" (374). Relying on "two plane mirrors, about four inches square, inserted in frames, and so adjusted that their backs form an angle of 90 with each other," as well as wooden screws and sliding "pannels [sic], to which the pictures are fixed in such manner

that their corresponding horizontal lines shall be on the same level," Wheatstone's stereoscope (Figure 3) was a fairly cumbersome prototype of the designs that would follow and become widely disseminated (375).

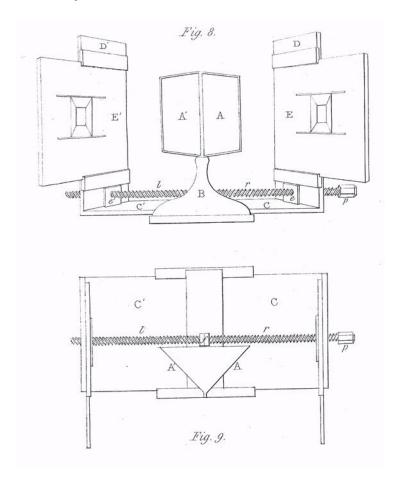


Figure 3. Design plans for stereoscope.

From Wheatstone's "Contributions to the Physiology of Vision" (Plate X).

Despite its awkward appearance, Wheatstone's design allowed him to view drawings of simple lines and outline figures (instead of photographs, a development that would occur later) in order to conduct numerous experiments on the nature of binocular vision; that is, the fact that each eye receives data or perceives objects from a slightly different angle or perspective. Like the thaumatrope, Wheatstone's stereoscope was initially developed as a scientific apparatus, and the illusory effects it produced were

studied and explained in terms of physiological discourse. Wheatstone's efforts, for example, effectively refuted arguments that images develop in the vitreous humor of the eye as opposed to on the retina:

A perfectly original theory . . . recently advanced by M. Lehot, who has endeavoured to prove, that instead of pictures on the retinae, images of three dimensions are formed in the vitreous humour which we perceive by means of nervous filaments extended thence from the retina. This theory would account for the single appearance to both eyes of objects in relief, but it would be quite insufficient to explain why we perceive an object of three dimensions when two pictures of it are presented to the eyes [via the stereoscope]. (391)

As with the thaumatrope, the use of the stereoscope strictly for scientific purposes would soon give way to the possibilities it created for popular entertainment.

About a decade after the publication of Wheatstone's essay, Sir David Brewster modified Wheatstone's design, creating a portable, handheld device with which photographic images could be viewed. As West points out, however, it was not until the wet-plate, or collodion, process was perfected in 1850 that reproducible photographic images allowed for the commercial potential of the stereoscope, which exploded when Brewster's model (Figure 4) was displayed at the Great Exhibition of 1851 and caught the eye of Queen Victoria (233). Within months, hundreds of thousands of devices were sold, "and by the mid-1860s, virtually every parlor in England and America possessed

¹¹ As previously mentioned, Brewster also developed the kaleidoscope, an optical device that, like the View-Master, is still quite prevalent in toyshops and playrooms.

one" (West 233). 12 Clearly, the widespread enjoyment of the stereoscope suggests that it occupied a prominence on par with the novel during the latter half of the century.

Additionally, it is interesting to note that the ubiquitous ownership of a stereoscope and the pleasures of home viewing it provided prefigure the similarly sweeping purchase and



Figure 4. Brewster type stereoscope with stereograph, ca. 1848.

domestic use of the television during the twentieth century.

Note the wealth of detail present in the visible stereographic image ("Brewster," Bill Douglas Cinema Museum).

The popularity and availability of the stereoscope increased when American polymath Oliver Wendell Holmes developed his own model in 1861, which he refused to patent in order to stimulate the rapid dissemination of stereoscopy (Figure 5). Holmes

¹² The Victorian-style stereoscope continued to be popular even into the twentieth century. Figure 5 below shows a Holmes model that belonged to my grandmother (left-hand image), who acquired it from the sale of a home filled with Victorian-era artifacts.

also wrote widely about the apparatus, helping to circulate public interest in the stereoscopic viewing experience.



Figure 5. Holmes type stereoscopes with stereographs.

The device on the left carries an imprint reading "Exposition Universelle Internationale 1900 HC White" and is marked with a U.S. patent date of 15 Oct. 1895 under the name "Perfecscope." The one on the right, manufactured by Underwood and Underwood of New York, bears the name "Sun Sculpture" and lists a patent date of 11 June 1901. Interestingly, the original owners of these carved their names (like Catherine Earnshaw) into the metal lens housing, which is also intricately designed with floral etchings. The stereograph on the left features a girl covered in five puppies ("Playmates," copyrighted 1900 by R.Y. Young and distributed by the American Stereoscopic Company). The stereograph on the right, which is vibrantly colored in reality, depicts two children getting into mischief ("When Ma's Away, the Children Play," no. 37 in a series copyrighted 1899 by T.W. Ingersoll, no distributer's mark). These two examples offer light-hearted viewing of adorable kids, but others show sublime landscapes or more gruesome depictions of hunters' trophies. Images captured by author of items in her own collection.

The slides that were inserted into the devices, made either of glass or pasteboard, consisted of two similar photographs (taken with two cameras placed about two to three inches apart or with one specially designed camera), situated side by side, and these depicted a wide range of scenes. Holmes published several essays on the stereoscope in *The Atlantic*, and in one of these, from 1859, he describes the production and variety of "the double-eyed or twin pictures, or STEREOGRAPH, if we may coin a name" (146, capitalization in original). The best stereographs, according to Holmes, depicted subjects rich with minute details to tickle the fancy:

The very things which an artist would leave out, or render imperfectly, the photograph takes infinite care with, and so makes its illusions perfect. . . . In three pictures of the Ann Hathaway Cottage, before us,—the most perfect, perhaps, of all the paper stereographs we have seen,—the door at the farther end of the cottage is open, and we see the marks left by the rubbing of hands and shoulders as the good people came through the entry, or leaned against it, or felt for the latch. (155)

Holmes emphasizes the perfection of this illusion, and he goes on to wax poetic about the possibility that "scales from the epidermis of the trembling hand of" William Shakespeare helped to create the visible marks on the cottage doorway (155). Indeed, such minutiae allowed viewers to imagine elaborate narratives about the stereoscopic scenes and to engage in a kind of visual tactility. This notion of the eyes touching images has been theorized in recent years by scholars of visual culture. Jonathan Crary, for instance, asserts that "the stereoscope . . . became a crucial indication of the remapping and subsumption of the tactile within the optical" during the nineteenth century (*Techniques* 62). The ability to perceive three dimensions in a two-dimensional image allows for and encourages the inclusion and absorption of the sense of touch in and by the sense of sight; tangibility is reassigned to the realm of visibility. The effect of the stereoscopic image "is a tangibility that has been transformed into a purely visual experience" (Crary, Techniques 124). The fusion of tangibility and visual experience also occurred, however, in relation to other proto-cinematic media, including devices that emerged to create the illusion of movement.

Animated Pictures and Projected Images

The particular history of Victorian-era devices designed to produce animated pictures is complicated by a profusion of names, both of people and of their inventions, as well as dates. In brief, English scientist Michael Faraday created his "Faraday Wheel" in 1831. While this wheel was actually an early form of electromagnetic generator, Faraday's observation of its rotating gears prompted him to write an article "On A Peculiar Class of Optical Deceptions" for the Journal of the Royal Institution of Great Britain, which contributed to the studies of perception conducted earlier by Roget and Wheatstone (as previous discussed). ¹³ Faraday's work led to the simultaneous development of two very similar apparatus in 1832 when Belgian physicist Joseph Plateau called his device the Phenakistiscope and Austrian mathematician Simon von Stampfer named his invention die Stroboscopischen Scheiben (the stroboscopic disc). 14 The mechanics of the phenakistiscope apparatus relied simply on a cardboard disc around which was drawn or painted a series of images with minute alterations. At the outer or inner edge of the disc, several slots or even holes served as the means of viewing the animation, which occurred as the disc, mounted on a handle, was spun rapidly while

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¹³ While not directly related to my work, it is worth noting the fascinating overlap between scientific fields as they emerged during the nineteenth century, as well as the cooperative process by which individuals in many countries pursued their various efforts.

¹⁴ Following the lead taken by film historians and optical toy collectors, I use the lowercased "phenakistiscope" as a general term for this particular kind of apparatus. A number of writers, particularly in online venues, use alternate spellings, such as "phenakistoscope" and "phenakistascope." Indeed, confusion over the spelling began with Plateau himself, who seems to have made a repeated error in his paper of 1833, which gave the apparatus the name "Phénakisticope." Derived from the Greek *phenax* (imposter, deception, trick) and *skopein* (to look at), Plateau's coinage—despite its apparent misspelling—emphasizes how the device misrepresents truth or reality and conveys a bit more trepidation than, say, the thaumatrope/wonder turner or the later zoetrope/life turner and praxinoscope/to look at action. Despite his fascination, Plateau was perhaps also a bit unnerved by the effects produced by the device.

facing a mirror (Figure 6). Through the looking-glass, then, viewers were treated to the spectacle of figures of all sorts moving in all kinds of ways. As long as the disc was spinning, the illusion of movement continued, repeating the image sequence indefinitely.

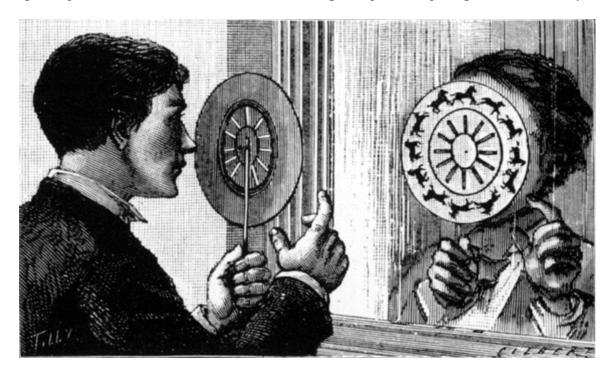


Figure 6. Phenakistiscope.

Like the thauamatrope, this device relied on the viewer's hands and eyes to generate the illusion. Unlike the earlier device, however, the phenakistiscope created the animation of pictures; here, for instance, the effect of the spinning disc would be a horse continuously galloping. It is interesting to note that the device masks the viewer, erasing him from—or rather merging him with—the vision in the mirror and intensifying the reality of the illusion. Image in the public domain and retrieved from Jobson.

Like the thaumatrope and the stereoscope, the phenakistiscope would become very popular with consumers. Beginning in 1833, various companies in a number of countries marketed the toy under names such as Fantascope, Phantascope Pantomime, Magic Panorama, Phantasmascope, Magic Wheel, Patinoscope, and *Lebende Bilder* (tableaux, literally "living/breathing images"). The wondrous names likely generated interest among consumers, who could purchase sets of discs featuring a range of subjects by many artists ("Phenakistiscopes"). As with stereographs, so diverse in their subject

matter, phenakistiscope discs offered a wide range of things to see, albeit artistically and two-dimensionally rendered rather than photographically and three-dimensionally captured. Nevertheless, the active participation required to create the mesmerizing illusions was probably part of the excitement sparked by the animated pictures. Crary comments on the similarity of the engagement of viewers of both kinds of devices: "the apparently passive observer of the stereoscope and phenakistiscope, by virtue of specific physiological capacities, was in fact made into a producer of forms of verisimilitude" ("Techniques" 89). Like stereographs with all their depth and detail, which was "transubstantiated into a compulsory and seductive vision of the 'real," the phenakistiscope discs allowed viewers to become immersed in the construction of illusory but actually perceived movement (Crary, "Techniques" 89). While the subjects depicted on the phenakistiscope discs were brightly colored drawings or paintings, typically of fantastic figures or patterns (what we might consider Victorian versions of cell animation or cartoons), the viewer's role in constructing the realistic appearance of movement was alluring.

As with the stereoscope, alternate designs of the phenakistiscope apparatus quickly began to emerge. One variation of the phenakistiscope used, instead of a mirror, a second slotted disc positioned several inches from the picture disc. This mirror-less concept was taken further in 1834 by British mathematician William George Horner, who constructed a cylindrical drum that could be spun. A strip—rather than a disc—with the subject was placed inside the drum, which had slots through which viewers peeped to see the animated pictures. Horner called his device the dædaleum, but the concept was not

marketed until the late 1860s when, interestingly, the device came with its own instructive text. Erkki Huhtamo explains that the Zoetrope produced by Milton Bradley was accompanied by a booklet titled *The Philosophical Principles of the Zoetrope, or Wheel of Life* (ca. 1867). It instructed the domestic users to develop an active relationship with the device – to place picture strips inside the drum and try different effects by spinning them faster and slower, or in different directions. The booklet even instructed users to try out combinations of partly overlapping strips, leading to a principle of "editing" moving pictures. (38)

These instructions, like Paris's narrative about the thaumatrope, encouraged viewers both to understand the science behind the toy and to enjoy the opportunities it provided for interactive play and entertainment. Akin to illustrated books, the zoetrope with its little manual offered viewers a way to appreciate, even control, the correspondence between text and images.

Following the phenakistiscope and the zoetrope a third notable form of animated picture device was developed. Hybridizing the earlier phenakistiscope and zoetrope concepts, Frenchman Émile Reynaud combined the use of mirrors with the cylindrical drum and picture strips in his Praxinoscope, patented in 1877. As with the other optical toys, the praxinoscope encouraged viewer participation, although spinning the drum by hand was not always necessary: some versions utilized steam or other means to drive the cylinder, thus beginning to sever the connection between the viewer and the construction of the illusion. A decade later, Reynaud had succeeded in developing an updated model of the toy that could project the animated pictures onto a screen, further distancing viewers from the production process and thereby simultaneously recalling the popularity

of magic lantern shows and helping to shift late Victorians toward more cinematic modes of spectatorship. This projection system, called the Théâtre Optique and patented in 1888, was used to show a paying public narrative animations of impressive length, thus preceding the Lumière brothers. Richard Neupert notes that "individual titles lasted from 8 to 15 minutes and consisted of 300 to 700 images, so the duration of Reynaud's subjects far exceeds the subsequent 50-second Lumière films" (np). Thus, the praxinoscope began as a parlor spectacle for small audiences and became a means of entertaining mass audiences (Figures 7 and 8).

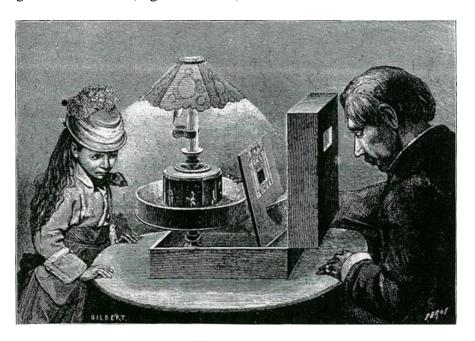


Figure 7. Praxinoscope.

Image (Gilbert and Perot 1880) in the public domain and retrieved from Tissandier. Reynaud's design established a little home theatre for viewing animated pictures. The man is situated to perceive the movement most fluidly; through the viewing slots, the reflected image sequence came to life. Despite her less ideal position, the child seems enthralled by the sight.

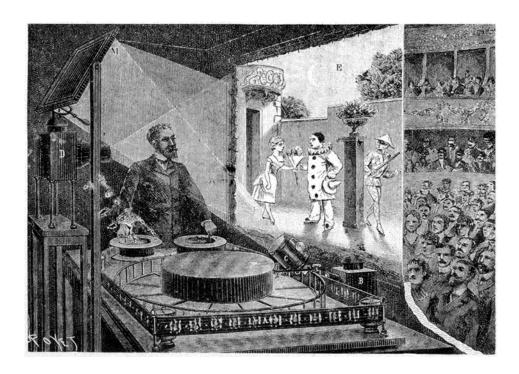


Figure 8. Théâtre Optique.

Image (by Louis Poyet, accompanying Gaston Tissandier's 1892 article "Le Théâtre optique de M. Reynaud" in *Le Nature* 999) in the public domain and retrieved from Navarro.

Similar to phantasmagoria shows, the illusion produced by the projected animations as shown above is intensified by hiding the apparatus and its operator—here, Reynaud himself—from the large audience. The lengthy picture strips, made of glass initially, then of gelatine, featured meticulously painted figures and depicted narratives of impressive duration. Eventually, photographic images would be used instead.

The phenakistiscope, zoetrope, and praxinoscope all occupy important positions on the proto-cinematic spectrum in terms of both technology and mass consumption.

These devices, along with the filoscope or flipbook first introduced around 1897, helped shape Victorian viewing practices in ways that encouraged the eventual move toward film. An array of devices that began to combine sequential photographic images and methods to produce illusions of seamless movement were, of course, also integral to the

shift toward industrialized cinema. The Mutoscope, Bioscope, Vitascope, Kinetoscope, and the most famous Cinématographe, for instance, were moving picture systems that emerged in the last couple of decades of the nineteenth century (I will discuss these more fully in Chapter V). The novel, I argue, was also part of this complex web of visuality and played an important role in the evolution of proto-cinematic technology.

Fiction as Proto-Cinematic Technology

The primary goal of this project is to describe and demonstrate a methodology for understanding fiction as proto-cinematic narrative, which will provide scholars of Victorian literature with a fresh interdisciplinary approach to reading texts as participatory in visual culture. That is, using the proto-cinematic technologies described above as a heuristic lens through which to read fiction allows us to productively interrogate the ways in which Victorian-era writers tested the limits of narrative and how they simultaneously asserted and erased the boundaries between textual and visual media. Additionally, however, my work offers an avenue for film historians and media scholars to consider the implications of narrative fiction on the development of visual technology and image-based media. Certainly, these aims might raise concern from various academic niches; scholars on either side of the textual-visual "divide" could object that I risk oversimplifying both literature and visual technology by reading them alongside one another. Some experts might argue that my work erodes important strides made in understanding the distinct capabilities of different kinds of media. While I acknowledge and try to avoid these pitfalls, I also attempt to show that, from the Victorians' perspective, such issues were only just becoming significant as the public grappled with

new forms of image production and, indeed, with new categories of fiction. The protocinematic qualities of fiction marked textual narrative as both visual and technological.

Tony E. Jackson makes a compelling argument for writing, particularly the novel, as a form of technology and asserts that "what enables it as a distinctive genre at all" is that "it must constantly work to perform telling that can somehow make up for the lack of showing" (21). My work also conceives of written narrative as technology, but my protocinematic approach seeks to read the telling as showing, thus demonstrating how narrative fiction participated in the cultural construction of a network between textual and visual forms and contributed to a growing social interest in and demand for narrative cinema—and, of course, the technologies that would make such a thing possible. The following chapters address a range of fictional narratives that exemplify the influence of various forms of more or less concurrent proto-cinematic devices and illustrate how several writers across the nineteenth century use techniques that mimic the unique effects of optical apparatus. The selected texts are representative of a range of historical moments, as well as author backgrounds and writing styles. The visual-to-textual adaptation for which I am arguing is as widespread as the dissemination of motion picture technologies, which indeed lends more support to reading nineteenth-century fiction itself as a proto-cinematic category or cultural series. The texts included here, nevertheless, offer useful case studies for illustrating how the effects of various devices were translated into narrative. The selected texts, in other words, are exemplary models for demonstrating my proposed method of using proto-cinematic technologies as a heuristic tool for literary analysis. Additionally, each text has received the "Frankenstein treatment" by the movie industry in that it has been plentifully adapted, suggesting that

filmmakers and television producers recognize something always already cinematic about the original narrative. Finally, as well as narrative features, each text possesses formal elements that can be read in relation to developing screen practices; that is, the chosen texts provide cues for later filmic structuring and distribution.

Moving chronologically through the century, I segue from Shelley's Frankenstein and its phantasmagoric magic lantern elements discussed here to Charles Dickens's third novel, Nicholas Nickleby (1838-39) in the following chapter. Dickens's novels have been read in relation to filmic technologies, but I add to such readings the influence of the science of persistence of vision and the thaumatrope to argue that Dickens was invested in linguistically translating optical illusions that relying on mental impressions. I contend that the serially published Nicholas Nickleby—along with its original 39 illustrations by Hablot K. Browne—may best be understood as a thaumatropic narrative that blends the linguistic with the visual, creating a unified narrative from component parts. Dickens also engages with thaumatropic effects through narrative depictions of characters who overlap one another, like images on either side of a thaumatrope disc. As with the thaumatrope, too, it is our persistence of vision that allows the illusion to work.

The concept of persistence of vision, as well as binocularity, also comes into play in the third chapter, which focuses on Emily Brontë's *Wuthering Heights* (1847). While it is a critical commonplace to acknowledge that the novel's complexity results in part from its narrative framing and inclusion of multiple points of view, I offer a new way of reading these features in terms of photographic and stereoscopic viewing practices that invited a focus on marginal details. I frame my analysis of Brontë's novel with an initial

close reading of an essay by Oliver Wendell Holmes, who describes the potentially unsettling effects of stereoscopic viewing and the individual photographs that make up a stereograph. Ultimately, I demonstrate that *Wuthering Heights* contributed to the kind of viewing and reading of images that Holmes related a decade after the novel's publication.

Moving into the latter half of the nineteenth century, my fourth chapter explores how Lewis Carroll's Alice books (1865, 1871) differently adapt proto-cinematic technologies. Indeed, the two books reveal and enact a cultural shift from privileging the photographic to desiring the animated pictures that would eventually lead to cinema. The Victorian desire to preserve stasis is simultaneously exemplified and challenged in *Alice in Wonderland*, and this photographic narrative gives way to far more phenakistoscopic or zeotropic animated narrative techniques in *Through the Looking-Glass*. I suggest that the Alice books are exemplary not only of the ways in which literature adapted and anticipated the cinematic, but also how narrative could serve as a model for protocinematic technological innovation and reader interaction.

In Chapter Five, I take up Sherlock Holmes, a character who, like Alice and Frankenstein's creature, is constantly recreated on screen. Sir Arthur Conan Doyle first introduced Holmes in the 1887 novel *A Study in Scarlet*, and the character last appears in the 1927 story "The Adventure of Shoscombe Old Place." This forty-year period also saw the development of multiple moving picture technologies that utilized sequential photographs, as well as the establishment of narrative cinema. The figure of Holmes was first adapted to screen in 1900, and since then numerous films and television programs have reproduced him. Clearly, Conan Doyle's novels and stories present a remarkable opportunity to explore what happens when the production of fiction and its film

adaptations overlap in time. I contend that the Sherlock Holmes corpus reveals a pattern of mutual influence between the textual and the visual. Like the other authors discussed here, Conan Doyle adapts visual effects and participates in establishing the visual literacy that would be necessary for cinema-goers and, later, for home viewing of television, particularly of detective/crime series. He also, however, incorporates techniques he may have seen in adaptations of his own character, which were then re-adapted for the screen. A back-and-forth pattern of influence thus exists between Holmes fiction and film.

I conclude by offering some final words on how the methodology I demonstrate throughout this project might be applied to other works. Reading literature through the lens of proto-cinema allows us to consider how text is technological and how narratives encouraged readers to become viewers. The recent surge in films, television series, and other media that rewrite or redeploy Victorian-era literary characters—*Penny Dreadful* (2014-2016) is a timely and relevant example of three seasons that call to mind the triple decker novels of the period—suggests not only that we are culturally intrigued by the Neo-Victorian, but also that the makers of current visual media recognize in the period's fiction an inherent proto-cinematic quality and adaptability. It is time more scholars acknowledge the nineteenth century as a period of moving words/motion pictures.

CHAPTER II – "AS IF BY SOME STRANGE OPTICAL ILLUSION": PERSISTENCE OF VISION AND DICKENS'S NICHOLAS NICKLEBY

"THE KETTLE began it. . . ."

Thus Dickens opens his *Cricket on the Hearth*.

"The kettle began it. . . ."

What could be further from films! Trains, cowboys, chases
. . . And *The Cricket on the Hearth*? "The kettle began it!"

But, strange as it may seem, movies also were boiling in that kettle.

From here, from Dickens, from the Victorian novel, stem the first shoots of American film esthetic, forever linked with the name of David Wark Griffith.

—Sergei Eisenstein (1942)¹

Contextualizing Dickens and Visual Media

Any comprehensive study of visual narrativity and proto-cinematic effects in nineteenth-century fiction must include the work of Charles Dickens, which has often been described as pictorial, filmic, and/or pre-cinematic. Originally published in 1942, Soviet filmmaker Sergei Eisenstein's groundbreaking essay, "Dickens, Griffith, and the Film Today," paved the way for scholars to address the relationship between Dickens, cinema, and other visual media. Arguing that the cinematography of pioneer American filmmaker D.W. Griffith drew heavily on Dickens, Eisenstein was the first to note,

Dickens's nearness to the characteristics of cinema in method, style, and especially in viewpoint and exposition, is indeed amazing. And it may be that in the nature of exactly these characteristics, in their community both for Dickens and for cinema, there lies a portion of the secret of that mass success which they both, apart from themes and plots, brought and still bring to the particular quality of such exposition and such writing. (206)

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¹ Sergei Eisenstein, "Dickens, Griffith, and the Film Today," 195.

For Eisenstein, the cinematographic and editing techniques of close-up, parallel action, and montage, among others, were always already present in the storytelling of Dickens and were taken up by filmmakers such as Griffith in the early twentieth century. Eisenstein rightly asserts that Victorian novelists, especially Dickens, thus provided perspectival and structural cues for the makers of narrative film and that this borrowing or adapting of writers' techniques helps to explain the "mass success" of cinema. Dickens (and other writers) certainly influenced the development of filmic modes of conveying narrative. Since Eisenstein, several critics, such as Grahame Smith, Francesca Orestano, and Joss Marsh, have examined the cinematic quality of Dickensian narrative, with film adaptations of the novels holding a prominent place in such scholarship. The constant production of new versions of Dickens's works for feature films and televised miniseries, as well as for stage performances, indicates that aspects inherent to his work lend themselves to adaptation; his narratives contain all the possibilities for cinematic reproduction. As I argue in this chapter, however, Dickens also participated in protocinematic visual culture and contributed to the normalization of new viewing practices that were emerging during the Victorian period.

In discussing the filmic narrative of Dickens's third Christmas book, *The Cricket on the Hearth* (1846), Eisenstein initiated an important thread in Dickens scholarship and film studies, one which has sought to understand the complex and multifaceted relationships between Dickens's use of language and nineteenth-century popular, material, and visual culture/s. A 1948 essay by Warrington Winters, for example, brought to light an important letter in which Dickens discussed his views on the mental visions produced in dreaming, and in the mid-1970s Harry P. Marten's essay "The Visual

Imaginations of Dickens and Hogarth: Structure and Scene" focused on examining the ways in which Dickens's novels are visual enterprises that approximate not film or dream, but narrative art. Contending that Dickens was heavily influenced by eighteenth-century engraver William Hogarth, who produced many series of narrative prints, Marten claims, "in the case of Dickens and Hogarth the works progress through interrelated, yet distinct visual frames. We are swept up by the pictorial vividness and intricacy of each unit" (150). For Marten, Dickens creates intensely graphic scenes, busy with details, which our eyes trace and consume in a manner akin to the way we absorb the contents of a framed piece of art. While the graphic quality of Dickens's work can be read in relation to narrative art and its influence on his descriptive strategies, it is also clear that Dickens responded to other forms of visual media that were prevalent during the century.

More recent scholarship on the relationship between Dickens's narrative modes and visual media has been conceived in proto-cinematic terms that continue the work of Eisenstein in sophisticated ways and situate the novelist more firmly within a nineteenth-century context of motion picture history. In a 1993 essay, for instance, Grahame Smith asserts, "Dickens's work can be seen as part of a continuum that includes the visual media . . . as well as the more conventional literary contexts out of which the novels were produced" ("Dickens" 55). In *Dickens and the Dream of Cinema*, published ten years later in 2003, Smith unites the psychology of dreams with the history of film and further argues that Dickens played an important role in the advent of the motion picture, serving as "one of the conditions that made it possible" (16). In both of these treatments, Smith reads Dickens's novels in relation to institutionalized, public spectacles, such as magic lantern shows, panoramas, dioramas, and theatrical performances. Focusing more overtly

on a particular form of proto-cinematic visual effect, Francesca Orestano insists "both Dickens's notion that visual codes can operate within the realm of literature, and his strategy for overcoming picturesque description, seem to originate with the magic box of the lantern and in the perceptual possibilities offered by the 'biunial' [a magic lantern apparatus featuring two lenses] and the 'dissolving views' . . . " (252). Similarly, Joss Marsh convincingly highlights the importance of the dissolving view—a magic lantern effect developed during the first decades of the nineteenth century—to the work of Dickens, emphasizing the linguistic choices the novelist made in the Gabriel Grub tale embedded in The Pickwick Papers (1837) and in A Christmas Carol (1843). Marsh notes while we have come to accept that cinema received its Dickensian inheritance in part from the nineteenth-century melodramatic stage, we have yet to learn that it is also by way of the magic lantern that cinema reveals itself as descended from Charles Dickens. Indeed, Dickens is 'cinematic' only and insofar as he responded to pre-cinematic technologies and popular entertainments. ("Dickensian" 336) Smith, Orestano, Marsh, and others imply that the techniques Eisenstein found cinematic in Dickens are more accurately described as the narrative responses to and linguistic manipulations of the visual realities of Dickens's own day, which developed within particular technological and popular contexts. What these scholars have failed to adequately address, however, is that Dickens's storytelling techniques responded not only to contemporary public spectacles, but that they also reflect Dickens's engagement with nineteenth-century optical science and the devices that would become a popular household means for demonstrating and understanding that science. Dickens's novels

helped to circulate and shape domestic methods of viewing and, in doing so, contributed

to an increasing readiness for audiences to desire and consume later forms of visual media. In other words, Dickens—and as I have previously demonstrated, Mary Shelley before him—anticipated and took part in the development of cinema in much the same manner as did the myriad proto-cinematic toys and technologies that arose during the nineteenth century.

This chapter further adds to conversations regarding Dickens's proto-cinematic narrativity by focusing on how the scientific concept of persistence of vision influenced his writing and, furthermore, how the illusory effects of optical toys that relied on this concept are incorporated into his work. I look particularly to the thaumatrope as a representative example of a device to which Dickens's work responds. Although scholars have not noted a connection between Dickens, persistence of vision, and the thaumatrope, a 2008 BBC television miniseries of *Little Dorrit* (1857), adapted by Andrew Davies, uses the toy in a rather intriguing and insightful way. Each of the fourteen episodes of the series opens with a title sequence that draws the viewer through a forest of spinning thaumatropes that are strung on the vertical axis. Some twirl slowly as we seem to pass them, deconstructing the illusion by showing the individual image on either side of the disc; others spin rapidly and display their illusions to great effect, merging the separate images as described in Chapter I. The device makes only this appearance in the series, but it is a visually-charged sequence that gestures toward the thaumatrope's "odd relation to Victorian literature" (Gunning "Hand and Eye: Excavating" 502) and highlights the scholarly possibilities of reading the work of Dickens and other Victorian writers through the lens of persistence of vision and what I will call thaumatropic narrative.

In Charles Dickens in Cyberspace, Jay Clayton effectively supports a contention that Dickens was amply invested in the physical sciences, in engineering and the mechanical arts, and in debates over the institutionalization and disciplinary division of science and scientific education (95-104). To be sure, Dickens cultivated a great interest in science and in visual apparatus, as made evident by numerous essays he wrote for his own serial publications, Household Words (1850-59) and All the Year Round (1859-70). These essays indicate Dickens's own personal investment in such issues, but he also knew his readers and addressed their curiosities and concerns. As keenly observant and culturally active as Dickens was, even in his youth, and as widely distributed and readily available as ephemeral visual devices were, it is likely he was well aware of all manner of optical (or philosophical) toys, including the thaumatrope, as well as the scientific and popular writing that was produced prior to and alongside the widespread dissemination of the toys. Dickens's novels, as well as his essays, sought to appeal to the same readers who were familiar, for instance, with Paris's *Philosophy in Sport*, which simultaneously educated and entertained its audience, as mentioned in Chapter I. Dickens would have been fifteen years old when Paris's work was first published, a point at which he transitioned from attending the Wellington House Academy day-school to working as a clerk for Edward Blackmore of Gray's Inn (Forster 74-83). If Dickens did not come across Paris's work during his teenage years, however, it is likely that he encountered it in one of its revised and republished editions, of which there were many between 1827 and Dickens's death in 1870. It is also entirely possible that Dickens and Paris knew one another personally, as they both held coveted memberships in the exclusive Athenaeum

club during the same years.² Additionally, a mutual acquaintance illustrated Paris's book: George Cruikshank. Certainly, Cruikshank's drawing for the commencement of the thaumatrope chapter in *Philosophy in Sport* shows that, like Dickens, Paris developed amusing and memorable characters (Figure 9).



" All things by turns."

Figure 9. "All things by turns."

Illustration by George Cruikshank for Chapter XVIII of John Ayrton Paris's Philosophy in Sport Made Science in Earnest (337).

The image depicts Mr. Seymour enthusiastically demonstrating the effect of the thaumatrope for two of his children, whose names—Louisa and Tom—are notable, as they pre-date the Gradgrind siblings in Dickens's *Hard Times* (1854). The caption to the illustration highlights the many puns Paris makes over the course of the chapter; again,

² Founded in 1824 by Coker, the Athenaeum was (and continues to be) an exclusive club for scientists, writers, and artists. Membership was limited to 1,000 individuals. Paris was a member from at least 1826, as his name appears in the club's *Alphabetical List of the Members, with the Rules and Regulations, of the Athenaeum* published in that year (57). Dickens was elected to the club in 1838, as he mentions with some delight at the end of a letter to Thomas Noon Talfourd, dated 15 July 1838, just after publication of the fifth number of *Nicholas Nickleby* (see *Life, Letters and Speeches* 116). Both Paris and Dickens are listed in the 1840 and 1842 editions as well (*Rules* 1840 and *Rules* 1842).

like Dickens, Paris seems to have been well aware of the ways in which humor could effectively function alongside instruction for nineteenth-century readers

While most of Dickens's novels have a socially-charged, educational purpose, The Life and Adventures of Nicholas Nickleby (1839), is especially bound up in issues of education and entertainment, instruction and spectacle. Nicholas Nickleby has not been adequately addressed by scholarship on Dickens's proto-cinematic qualities, which has tended to favor his Christmas stories (Eisenstein and Marsh, for instance), perhaps because they are brief and more narratively compact. Smith's monograph briefly discusses how theatrical melodrama clearly influenced Nicholas Nickleby (103), but neither he nor other critics seem to have found the novel a useful case study for demonstrating the influence of any particular optical concepts or devices. I offer a reading of Dickens's third novel that explores the text as one that uses persistence of vision as a guiding principle that allowed for nineteenth-century audiences to become more familiar with and to embrace the illusion produced by optical toys, such as the thaumatrope. Nicholas Nickleby, I argue, may best be understood as a fictional narrative that participated in an ongoing shift in Victorian modes of seeing.

Reading Persistence of Vision in Nicholas Nickleby

Following *The Pickwick Papers* and *Oliver Twist* (1838), *Nicholas Nickleby* was initially serialized in twenty installments between April of 1838 and October of 1839 and featured 39 illustrations by Hablot Knight Browne, or Phiz. The novel's multiple plots variously follow the fortunes of members of the Nickleby family after the death of Nicholas the elder, who lost his money to speculation, leaving his wife and two children penniless and at the mercy of his wealthy but miserly brother, Ralph. The insidious Ralph

disposes of Nicholas the younger by helping him to a teaching position in a Yorkshire school and attempts to use his niece Kate's beauty and naivety to ply investors after winning her gratitude by finding her a job with a dressmaker. Nicholas escapes the school, joins a theatrical company for a time, and finally returns to London to save his sister from his uncle's snare. All ends well when Ralph commits suicide and the siblings marry suitable partners. Although it was very popular with Dickens's contemporary readers, this novel seems to have been generally less admired than many of Dickens's other works and has undergone comparatively little critical treatment. Nicholas Nickleby is, perhaps, best remembered and most frequently discussed for its portrayal of moral, educational, and artistic issues: Mr. Squeers and Dotheboys Hall, little Miss La Creevy and her miniature painting, and the Crummleses' provincial theatre troupe present us with many memorable and provocative moments throughout the picaresque narrative. In terms of visuality, the novel creates ample opportunity to discuss the ways in which illustration, painting, theatre, and individual displays or performances are yoked together into a complex network.

Certainly, the theatricality of the novel, as well as its infamously abrupt adaptation for the stage, has been addressed by scholars.³ More in line with my purposes, however, are scholarly treatments that examine how Dickens's work was involved in a culture increasingly aware of the act of seeing. Gerard Curtis, for example, in an essay titled "Dickens in the Visual Market," comments on the prevalence of advertisements related to sight or to visual technologies in each number of Dickens's serial novels. In

³ See, for example, Grahame Smith's *Dickens and the Dream of Cinema*, Barbara S. Millard-Anderson, and Tore Rem.

discussing an advertisement for jewelry that appeared in the final numbers of *Nicholas Nickleby*, for instance, Curtis notes:

Victorian advertisers did not forget the diagrammatic eye . . . as a medium to bring to consciousness the process of looking in reading, the link between the mind's eye and the physical eye. These eyes act as a reminder that even in the act of reading, a reader is involved in the process of looking; they make readers hyperconscious of their own eyes observing. This ocular self-consciousness was part of a whole culture of increased scientific and artistic observation, a culture that was promoted through the book trade. (215)

Like Curtis, I am interested in exploring Victorian conceptions of reading as an act of looking, but I am also interested in how reading was (and is) an act of engaging with narrative constructions of visual phenomena and sharing in the production of optical illusions. That is, my intentions here are to examine how Dickens linguistically and structurally represents the link, as Curtis puts it, between the mind's eye and the physical eye in ways that encouraged readers to consider how persistence of vision allows for illusions to be understood and perceived. In *Nicholas Nickleby*, inward and outward sight/s are often fused, similar to the inward and outward images of a thaumatrope, generating what I would like to call thaumatropic narrative. One of Browne's illustrations for the novel highlights this fusion and calls attention to the possibilities posed by the act of reading: readers are both viewers and performers in the process (see Figure 10).



Figure 10. "The Great Bespeak for Miss Snevellicci."

Plate 15. Perdue.

This illustration places the reader in the position of an actor peeping through the curtain and into the crowded audience. The spectators, in turn, stare back in anticipation, awaiting the performance—our performance. Readers are thus voluntarily thrust into the simultaneous roles of audience member and player; this image would have made Victorian-era readers keenly aware of being observed even as they were observing, as Curtis claims in relation to advertising. Readers have both insider and outsider status, and we see the interior layered onto the exterior in this exemplary instance of double vision.

Such layering occurs textually as well as visually in Dickens's novel. A telling moment occurs for readers when Kate Nickleby's first employer, the dressmaker Madame Mantalini, finds herself in dire financial straits and is visited by the repo men, Mr. Tix and Mr. Scaley:

Poor Madame Mantalini wrung her hands for grief, and rung the bell for her husband; which done, she fell into a chair and a fainting fit, simultaneously. The professional gentlemen, however, were not at all discomposed by this event, for Mr. Scaley, leaning upon a stand on which a handsome dress was displayed (so that his shoulders appeared above it in nearly the same manner as the shoulders of the lady for whom it was designed would have done if she had had it on), pushed his hat on one side and scratched his head with perfect unconcern, while his friend Mr. Tix, taking that opportunity for a general survey of the apartment preparatory to entering upon business, stood with his inventory-book under his arm and his hat in his hand, mentally occupied in putting a price upon every object within his range of vision. (Dickens 195)

This scene might be easily overlooked as a cheap bit of comedy, but the humorous spectacle calls attention to the fusion of outward textuality—what we read—and inward visuality—what we imagine. The description of Mr. Scaley's figure overlaid with a woman's gown generates a highly amusing image of a man, reptilian and with "a pimple on his chin," clothed in sumptuous, bare-shouldered feminine attire (196). The emphasis on Madame Mantalini's hands, too, seems significant, for they embody and perform actions that conflate her grief with her husband, who is in fact responsible for their pecuniary hardship. After she manipulates the bell cord to beckon Mr. Mantalini, we have the description of Mr. Scaley "not at all discomposed," but apparently carefully composed, as indeed he is: Dickens's diction linguistically creates a theatrical tableau vivant. Following this, the parenthetical addition details his precise position in relation to the dress. Finally, we return once more to Scaley, depicted with "his hat on one side and

scratch[ing] his head." This passage exemplifies what I mean by thaumatropic narrative: the tugging of a cord initiates a series of images that are presented in rapid succession, culminating in the one superimposed over the other, thereby combining the two. The parentheses may be significant here, as well, since the physical type of the text creates a rounded shape, which sets off one distinct part of the image from what is behind, or on the *flip* side. The description of Mr. Tix, too, emphasizes the act of looking, as he carefully scrutinizes the room and makes a mental calculation of "every object within his range of vision." Clearly, the illusions embedded in this scene are designed solely for the enjoyment of readers; no characters witness or comment upon them. Dickens's text, which emphasizes the superimposition of one element over another in thaumatropic fashion, translates for readers the visual experience of perceiving an optical illusion. This linguistic adaptation, I suggest, contributed to an increasing familiarity with newly circulating scientific ideas and helped to shape a growing visual literacy. Dickens pushes the boundaries of written media, offering readers an opportunity to visualize the merging of elements described in the scene.

Of course, Dickens also expected that his readers would want visuals in the form of illustrations to accompany his text. Browne's rendering of the scene discussed above is remarkable, also, for the ways in which it depicts and departs from Dickens's representation of the action (see Figure 11).



Figure 11. "The Professional Gentlemen at Madame Mantalini's."

Plate 13. Perdue

Indeed, the image both complements and complicates the written passage, as it presents a rather busy picture that relies on Dickens's exposition, while also adding to it. The composition of the illustration is oddly symmetrical, a visual effect achieved through the balanced distribution of figures and frames. On the one side we see the prone Madame Mantalini with closed eyes, along with Kate Nickleby watching over her with concern, attempting to revive her employer. Additionally, the rotund Mr. Scaley seems bursting out of the gown behind which he stands. On the other side, Mr. Tix (in a

depiction that appears to me more reptilian than that of Scaley) seems to converse with a clothed dressmaker's form. These two figures repeat and reverse the arrangement of the women on the left side of the image, with the line of Mr. Tix's calculating gaze inclined into the faceless bonnet, which looms sightlessly over him in the same position as Kate looking on at Madame. We have the foregrounded addition here of Mr. Mantalini, who appears grandly attired in a robe the shape of which emulates the full skirts of the ladies' gowns on display. Evidently oblivious to the trouble and discomfort he has caused his wife, Mantalini sits backward on his chair, emphasizing his masculinity despite the visual identification we make between him and the women's clothing, with his eyes closed and his nose in the air. Between the sets of figures, the mirror strategically reveals the backside of Mr. Scaley's hat, so we see both sides at once, as with a thaumatrope. Surrounding the group and creating a backdrop or set, three visible walls present us with a series of frames: pictures, doors, and moldings complete the visual effect of a symmetry that is mirror-like in slightly twisted, humorous ways. The illustration, then, lends itself to Dickens's narrative illusion by offering readers an optical deception of inversion and doubling that relies on the presence of details that are, in turn, absent from the narrative. In a sense, the narrated image and the illustrated image become one for readers, allowing us to enjoy the blended effect of separate depictions.

The nature of serial publication created another kind of opportunity for readers to become actively engaged participants in or performers of the act of reading in a material and mechanical way. In a publisher's note to the facsimile reproduction of Dickens's novel in its original serialized form, a clarification is made regarding the illustrations, which "were printed on a stiffer paper than the text and situated between the front

advertisements and the chapters of the novel" (vi). That is, all of the images preceded the narrative itself. During serialization, readers could look at the illustrations alone and also flip back to them as they encountered scenes in the narrative. Additionally, however, when the serial run was complete, "readers could have the whole text bound as a book with the illustrations inserted as closely as possible to the appropriate place in the narrative" (vi). Readers who chose to preserve their serial parts in a complete, bound copy could select exactly where they wanted each illustration to appear in the text, lending them a unique control over the final product and allowing them a degree of creative authority in making the text their own according to their personal visual and storytelling designs. Of course, the original placement of the illustrations also suggests that readers likely encountered Browne's interpretations of Dickens's scenes before reading them, which may have had a thaumatropic effect in establishing a mental impression or visual memory that was called forth in the act of reading the corresponding text.

Characters themselves often experience such thaumatropic visions in *Nickleby*, as well. An exemplary narrative moment occurs in the latter half of Dickens's novel, when pernicious Ralph Nickleby is clandestinely followed by Mr. Brooker, a man he had once employed. When Brooker reveals himself, Nickleby "survey[s] him from head to foot" without recognition, noticing only the external appearance of his former acquaintance:

A spare, dark, withered man, of about his own age, with a stooping body, and a very sinister face rendered more ill-favoured by hollow and hungry cheeks, deeply sunburnt, and thick black eye-brows, blacker in contrast with the perfect whiteness of his hair; roughly clothed in shabby garments, of a strange and

uncouth make; and having about him an indefinable manner of depression and degradation;—this, for a moment, was all he saw. But he looked again, and the face and person seemed gradually to grow less strange; to change as he looked, to subside and soften into lineaments that were familiar, until at last they resolved themselves, as if by some strange optical illusion, into those of one whom he had known for many years, and forgotten and lost sight of for nearly as many more. (Dickens 431)

Here, Nickleby views a seemingly unfamiliar, grotesque figure that slowly morphs into a man he had known in the past. Brooker's features seem "to change" and move of their own accord—to "resolve[...] themselves"—while Nickleby observes. Certainly, there is a phantasmagoric visual quality at play here, one that Orestano and Marsh might describe in terms of the magic lantern and the dissolving view. The heavy contrast between Brooker's black brows and white hair seems additionally to embed a photographic visuality to this narrative image, which is entirely possible given that the photographic camera was being developed while Dickens was in the process of writing *Nickleby*. More importantly, however, this passage also creates and calls attention to a thaumatropic effect. The "strange optical illusion" occurs, significantly, as a result of Nickleby's continued looking—his persistence of vision allows him to realize Brooker's identity. Brooker's current outward appearance, which is "strange," blends imperceptibly with Nickleby's inward recollection of a "familiar" but "forgotten" face, thus merging two different pictures of the man. Like a rapidly spinning thaumatrope, the narrative unites

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⁴ By 1837 Louis Daguerre had hit upon the process that would become known as daguerreotypy; he publicized his method in 1839. As mentioned in Chapter I, Daguerre's method became widely and rapidly disseminated.

Nickleby's inward and outward sight/s. Images past and present, imprinted visual memories and external seen realities, become one.

Ralph Nickleby, himself, is frequently merged with his relatives, as Dickens blurs distinctions between generational differences and familial faces. We are told toward the end of the novel that "a close likeness between" Nicholas and his sister "was apparent" as they "stood side by side, with a gallant bearing which became them well. . . . The air, carriage, and very look and expression of the brother were all reflected in the sister, but softened and refined to the nicest limit of feminine delicacy and attraction" (541). The two resemble one another so much that apparently the only difference is gender. Of course, it is not unusual for siblings to look a great deal alike; Dickens here seems to be highlighting the shared appearance of the pair in order to bring into view the "more striking . . . indefinable resemblance in the face of Ralph to both" (541). Again, that there is a family resemblance isn't all that remarkable, but its "indefinable" quality generates in the mind's eye a flickering thaumatropic effect as we consider how to perceive the sibling's gallantry in relation to Ralph's reprehensible character:

While they had never looked more handsome nor he more ugly, while they had never held themselves more proudly, nor he shrunk half so low, there never had been a time when this resemblance was so perceptible, or when all the worst characteristics of a face rendered coarse and harsh by evil thoughts were half so manifest as now. (541)

Though Ralph is seemingly opposite in nature and appearance to both Nicholas and Kate, they nevertheless bear a striking outward resemblance to one another. Despite looking completely different, a *sameness* is evident here. A kind of twinning occurs (in the word

itself we can see a fusion of "twirling" and "spinning"), calling to mind an earlier scene during which Nicholas meets the twin Cheeryble brothers. The coarseness and evil in Ralph are the flip side of the coin—the reverse of, and the complement to, the apparent goodness in his niece and nephew. Taken together, this family unit represents a complex portrait, a dynamic fusion of the past and the present, the old and the young, the rich and the poor, the soon to be dead and the soon to be wed.

In a collaboratively written essay on doubles and twins in the works of Dickens and Mark Twain, Susan K. Gillman and Robert L. Patten point out that "Dickens tends to explore the implications of doubleness: characters complement one another, though their connection may not be genetically or physiognomically apparent, nor need they even share the same gender" (441). They go on to say, "doubles thus for Dickens become ways of expressing the spectrum of possibilities for character and of enacting alternative futures for the protagonist" (444). Certainly, in the case of the Nickleby family, the genetic and physiognomic similarities are made obvious, and the characters represent alternative possibilities. Yet this doubling also has visual implications, which I am suggesting might be considered in terms of the thaumatrope and its reliance on distinct images that are brought together into a more complete picture. In the passage above, it is precisely the presence of seemingly positive qualities in Nicholas and Kate, paired with the presence of negative qualities in Ralph, that makes the resemblance between them all "so perceptible" and "striking." As I mentioned earlier, the combining of the images on a thaumatrope works only because one picture is in opposition to the other, and the illusion of both sides being simultaneously perceptible occurs in reality while one side is seen and the other is not.

Reading the remarkable likeness between Ralph and his brother's children in terms of thaumatropic narrative thus highlights the tensions between what Kate Flint has called the seen and the unseen. Flint asserts that "visuality was crucial to Victorian debates about the place of the individual in the world. . . . [I]t formed a connecting line – sometimes clearly so, sometimes hazy and indistinct – between the material and the invisible worlds, between the apparently knowable and the realm of hypothesis, between the figured and the imaginative, between the body and the mind" (311-12). The Nicklebys' outward appearances may be very much alike, but the similarity also serves to emphasize the unseen interior of Ralph's mind, filled with "evil thoughts." This individual seems at such a moment to be "knowable" as an unsympathetic character. At other moments in the text, Ralph's mind is made visible to us, and though his thoughts often do little to redeem him for us, he does occasionally have thoughts that move us, such as when he imagines Kate living with him and keeping house.

Mrs. Nickleby's thought process, too, is often laid bare to us, and she is constantly projecting fantasies upon her children, fantasies that merge reality with imagination.

When Ralph informs Kate of his intention to place her with Madame Mantalini, for example, Mrs. Nickleby succumbs to the following reverie:

Now, the first ideas called up in Mrs. Nickleby's mind by the words milliner and dress-maker were connected with certain wicker baskets lined with black oilskin, which she remembered to have seen carried to and fro in the streets, but as Ralph proceeded these disappeared, and were replaced by visions of large houses at the West End, neat private carriages, and a banker's book, all of which images succeeded each other with such rapidity, that he had no sooner finished speaking

than she nodded her head and said, "Very true," with great appearance of satisfaction. (Dickens 91)

Mrs. Nickleby's memory—which, incidentally, is called into question many times in the novel—is modified by Ralph's words. As he speaks, the visions of the poor wicker baskets are displaced by the rich houses, carriages, and the bank book. In a moment quite reminiscent of the magic lantern but also anticipatory of cinema, we have here Ralph's words evoking moving pictures in Mrs. Nickleby's mind and, because she sees these images in her mind's eye, Mrs. Nickleby accepts the fantasy as truth. As in previous passages, we seem to have a blending of images: the reality of Kate's situation is layered over by her mother's imagination. We also have here a proto-cinematic description of "images succeed[ing] each other with such rapidity" that they seem very much like the effect of a thaumatrope or, perhaps, later developments that rely on persistence of vision: the phenakistoscope, flipbook, or zoetrope. Mrs. Nickleby persists in such visions and, though few of them are anything like prophetic, one of her projected fantasies is at last realized when Nicholas is taken on as a partner by the Cheeryble brothers.

Like Mrs. Nickleby, we are constantly encouraged to fuse the material reality of what we see with the visions called forth by reading the novel. Dickens invites us to merge the textual with the visual; as he turns a phrase, we project images. As we turn pages, moving back and forth between plotlines, as we gain momentum in the turning and the reading, the various story arcs begin to blend and fuse, creating a unified picture of a family that experiences calamity and calm by turns. In a sense then, *our* persistence of vision as readers allows us to experience the text as a thaumatropic narrative. With a novel of such enormous proportions, we must have persistence, indeed, as Dickens

himself did. Christopher Innes has commented on the difficulties posed by serial publication, pointing out that the process of writing monthly installments frequently led Dickens "to improvise as he went along," creating "independent unit[s], while at the same time picking up all the separate strands of the plot initiated in earlier instalments to preserve continuity" (65). Thus, Innes continues,

Dickens evolved a technique of counterpoint and accretion. Each monthly section of a novel like *Nicholas Nickleby* was typically subdivided into three chapters: the first two followed the fortunes of one character or group, while the third switched to another, which then became the subject of the opening chapters in the following section. This produced a binary structure, dividing attention between two separate but interlinked stories . . . with each containing its own subset of minor figures. The same structural contrast carries over into the fabric of the novel. (65)

This "binary structure" of "counterpoint and accretion" suggests, on the one hand, a framework that calls to mind musical theory but, on the other hand a thaumatropic design that turns continuously back and forth and relies on built momentum to achieve the most effective merger and union of the story arcs, characters, and themes of the novel.

Dickens's writing process and structural concept thus emulate the mechanical action of the thaumatrope, resulting in a visually-charged novel that delights and educates readers. Most significantly, reading *Nicholas Nickleby* in relation to the thaumatrope invites us to understand his method of characterization as one that frequently presents seemingly flat characters who have surprising complexity, multiple sides, even depth. The thaumatrope requires active participation to create the illusion of the complete, more nuanced image

and Dickens, I suggest, expected his audience to perform similar work—or play—while reading.

Conclusion: Blackout

What I have been arguing here, that Dickens was influenced by a particular form of optical illusion as produced by the thaumatrope, is not unique to *Nicholas Nickleby* or even to Dickens himself. Thaumatropic narrative, the linguistic representation of the flickering merger of images, might be found in many works of fiction during the Victorian period. My aim in this chapter has been to show how this technique plays out in Dickens's novel in part because it was composed while the thaumatrope was gaining popularity as a parlor novelty. More significantly, however, it is important that we broaden Dickensian proto-cinematic scholarship to include more technologies and cultural institutions than the magic lantern and theatrical spectacles. Privileging only certain kinds of apparatus ignores the fact that the work of Dickens (and others) can be read as proto-cinematic in ways that encompass optical devices largely overlooked or forgotten by literature scholars (as previously mentioned, film historians and media scholars are well aware of the cultural importance of such apparatus). Though the popularity and impact of at-home, ephemeral devices like the thaumatrope may not have been as long lasting as the enduring public spectacle of other forms of visual entertainment, these toys did affect the way people viewed themselves and the world. As I have demonstrated by reading thaumatropic narrative in Nicholas Nickleby, that changing perception included a growing awareness of persistence of vision as scientific concept that helped to explain the complex nature of the human mind, imagination, and reality.

Many scholars, including Clayton, Innes, Marsh, and Juliet John,⁵ have examined Dickens's novels for the ways in which they encourage cinematic, multimedia, and/or social adaptation. In "Dickens and Film," Marsh points out "since 1897, when the Mutoscope Company put the *Death of Nancy Sykes* [sic] on the screen, more films have been made of works by Dickens than of any other author's" (204). John explains the prevalence of such filmic adaptations as a result of Dickens's

ability to blur the boundaries between subjectivity and objectivity in characters and readers (or 'consumers')[, which] is crucially important to film-makers and hence to Dickens's mass success. Dickens's novels can simulate the emotional innerness of the realist novel and classical Hollywood narrative in a way that stage melodrama does not. . . . It is his dependence on the externalized *methods* of melodrama (more easily transferable than realist techniques to other media) to recreate the feeling of emotional innerness and intimacy that has ensured Dickens's shaping of cinema. In this respect, Eisenstein was right to prioritize Dickens's influence on the screen over that of stage melodrama. (203)

With *Nicholas Nickleby*, Dickens achieved a unique combination of the "emotional innerness" of realism and stage melodrama, but it is not only because of melodramatic methods, as John asserts. As I have shown, thinking about the text in terms of mechanical devices, optical illusions, thaumatropic narrative, and persistence of vision offers further insight into "Dickens's shaping of cinema": not only do his narratives translate well to other media, but they also *already have translated* visual media techniques. That is, like

⁵ See work as previously mentioned by Clayton, Innes, and Marsh, as well as Juliet John's *Dickens and Mass Culture*.

the thaumatrope itself, Dickens's work—indeed, nineteenth-century fiction collectively, as this project claims—functions as a proto-cinematic artifact. My work thus contributes to conversations about Dickensian adaptation by reframing who is doing the adapting. A brief look at a final thaumatropic convergence in another of Browne's illustrations to *Nicholas Nickleby* will concretize what I mean (see Figure 12).



Figure 12. "Linkinwater intimates his approval of Nicholas."

Plate 23. Perdue.

In this depiction the twin Cheeryble brothers, who often finish one another's sentences like sides of a thaumatrope complete each other, ⁶ stand with linked arms as their old friend and respected clerk Tim Linkinwater commends their newly hired assistant bookkeeper, Nicholas Nickleby, who bends over the desk, hard at work. Twin top hats hang on the wall over the brothers, and twin files or portfolios stand ready on a shelf over the writing desk. The image emphasizes distinctive pairings of people and objects. Significantly, Linkinwater's beloved companion, a blind blackbird called Dick, presumably perches in his cage overhead, calling to mind one of the most popular nineteenth-century thaumatrope designs. Although Dick is sightless, and we cannot actually see him in the illustration we are invited to imagine him in the midst of the twinning that occurs on each side of the circular drawing; indeed, the eye is drawn to the top center of the illustration, and the bird's lack of sight makes us very much aware of our own viewing process. Browne here creates a subtle version of the optical toy, similar to the dress superimposed on Mr. Scaley scene discussed earlier. The blurred edges of the round illustration (in fact, of all thirty-nine of them) simultaneously convey the mood of a theatrical spotlight, a magic lantern projection, and a twirling thaumatrope. Again, the novel adapts optical effects of visual spectacles both public and private.

The adaptation of spectacle inherent in Dickens's novel resurfaces in the opening sequence of Douglas McGrath's 2002 film version of *Nicholas Nickleby*, which calls attention to several modes of visuality embedded in the text. As the production company logos for United Artists and Hart Sharp Entertainment appear in succession on the screen,

⁶ The very cheerful Cheerybles might also have been a precursor of Lewis Carroll's Tweedles, who also have proto-cinematic qualities, as I discuss in Chapter IV.

a swell of orchestral music can be heard, as when the pit is warming up prior to a theatrical performance. Suddenly, the tap of a conductor's stick is heard, and we see the rich, red folds of a curtain filling the screen. As the camera zooms out, the curtain opens and, significantly, we see human hands parting the fabric, revealing the small scale of this toy stage. A brightly painted set is shown, with portions of it staggered on the stage to resemble the three-dimensionality of a diorama. Groups of cardboard figures slide into view on the stage, and actors' names are superimposed on the screen. The third such grouping takes place with a cut to a new set, which foregrounds what appears to be a pigtailed girl standing behind (or in) a fire. The set piece houses a wheel, which is turned by a visible, full-sized hand at stage right, making the flames appear to flicker. Another scene is quickly revealed, and the camera slowly zooms in on a busy room filled with miniature furniture and knick-knacks. We view, in turn, a table laden with candles, flowers, and letters; a music stand bearing sheet music and a bell; an oversized pincushion alongside two pairs of shiny, black boots; and a chalkboard with the design sketch for the "Wheel of Fire" set piece we have previously seen in action. Panning left and slowly refocusing, the camera captures a tiny lantern, which is lit by a regular sized match held in large fingers. Eventually, the camera cuts to a full view of the miniature set once more, the curtain falls, the lights fade—for several moments distilling into two eyelike spotlights—and the house lights go down, leaving us in a complete blackout.

This opening sequence clearly draws on the visual elements of Dickens's novel, particularly the humorous and melodramatic Crummles theatre troupe. The miniaturizing of the "play" reflects the fun Dickens pokes at the Crummles (e.g., their "Infant Phenomenon" who is not actually a child, etc.), but it also pays homage to Miss La

Creevy's business in the narrative of painting miniature likenesses and to the simple innocence of childlike Smike. Additionally, the cardboard players, while hinting toward two-dimensionality of characters, are placed on the small stage in a manner that invites viewers to perceive three-dimensionality, as we might when looking into a peepshow toy or seeing a large-scale diorama. The hand spinning the fire wheel to create a flicker effect is the closest we come in this film adaptation to any thaumatropic gestures; nevertheless, there is some resemblance between the toy theatre special effect and the wonder-turner. Though brief, McGrath's title sequence fuses together the multiple modes of visuality already present in Dickens's narrative and encourages viewers to watch the subsequent cinematic production with a distinct view of the past and the proto-cinematic technologies that led to the film's very existence.

CHAPTER III - "THE AIR SWARMED WITH CATHERINES":

PHOTOGRAPHIC AND STEREOSCOPIC MARGINALITY

IN WUTHERING HEIGHTS

There is an old saying that those who eat toasted cheese at night will dream of Lucifer. The author of *Wuthering Heights* has evidently eaten toasted cheese. How a human being could have attempted such a book as the present without committing suicide before he had finished a dozen chapters, is a mystery. It is a compound of vulgar depravity and unnatural horrors, such as we might suppose a person, inspired by a mixture of brandy and gunpowder, might write for the edification of fifth-rate blackguards.

—Unsigned review (July 1848)¹

Emily Brontë and Victorian Visual Culture

From Dickens, who lived and breathed the Victorian era in the busy hub of London and whose prolific work enjoyed long and widespread popularity, I turn now to Emily Brontë, whose rustic life and work has been shrouded in mystery. Despite her somewhat sheltered existence and assertions by a number of critics that she was unworldly, Brontë, like Dickens, was certainly a keen observer of her surroundings. This chapter situates Brontë within Victorian visual culture and asserts that her work adapts and anticipates photographic and stereoscopic viewing practices of the mid-nineteenth century.

Brontë's sole novel, *Wuthering Heights*, was first published (under her pseudonym, Ellis Bell) along with Anne Brontë's *Agnes Grey* in December 1847 by Thomas Cautley Newby of London. It has often been misunderstood, even maligned, by readers and critics. Many contemporary reviews of the text were unflattering at best and some, as the epigraph taken from the Philadelphia-based *Graham's Lady's Magazine*

¹ Quoted in Rebecca Johnson's edition of Wuthering Heights, 435-36.

suggests, were scathing in their outright hostility and mockery. Another critic, publishing a review in *The Examiner*, a weekly British periodical, called *Wuthering Heights* "a strange book. . . . [W]ild, confused, disjointed, and improbable;" its characters are rude "savages" who represent "coarse and loathsome" qualities that are unfit for public consumption (qtd. in Johnson 435). Brontë's novel presented readers on both sides of the Atlantic with an uncomfortable combination of sensations; the book was powerful, but offensive and/or problematic largely because of its seeming detachment from cultural realities and social niceties. Even Charlotte Brontë, in her Preface to the 1850 edition of *Wuthering Heights* (which appeared two years after Emily's death), failed to fully acknowledge and praise the potent complexity and significance of the novel. Instead—though perhaps unintentionally—she rationalized its poor initial reception, calling it "a rude and strange production" by which well-mannered readers unfamiliar with the author and with the moorlands and its people were reasonably alienated:

The wild moors of the north of England can for them have no interest; the language, the manners, the very dwellings and household customs of the scattered inhabitants of those districts, must be to such readers in a great measure unintelligible, and – where intelligible – repulsive. Men and women who, perhaps, naturally very calm, and with feelings moderate in degree, and little marked in kind, have been trained from their cradle to observe the utmost evenness of manner and guardedness of language, will hardly know what to make of the rough, strong utterance, the harshly manifested passions, the unbridled aversions, and headlong partialities of unlettered moorland hinds and rugged

moorland squires, who have grown up untaught and unchecked, except by mentors as harsh as themselves. (1)

While it is possible that the elder sister's prefatory remarks are actually a tongue-in-cheek commentary about the limitations of polite convention, the absurdity of social affectation, and/or the myth of urban civility, many readers would likely have overlooked the subtle gibes and focused instead on Charlotte's postmortem depiction of Ellis Bell/Emily as an inexperienced and unworldly recluse, as a rustic and "rugged moorland" woman in some ways as "untaught and unchecked" as her characters. Indeed, the 1850 Preface attempts to explain, though not necessarily excuse, the novel's perceived shortcomings by pointing to Emily's upbringing as "a native and nursling of the moors" and to her "disposition [which] was not naturally gregarious[;] circumstances favoured and fostered her tendency to seclusion" (li). Charlotte thus casts *Wuthering Heights* and its author as largely separated from the wider world, as well as the local community, effectively marginalizing both the text and her sister.

Later critics have also remarked upon the novel's apparent dissociation from external concerns, both cultural and literary. Lucasta Miller explains that the tendency to think of the novel as "a text uniquely and miraculously disconnected from the rest of literature" comes "as an indirect result" of Charlotte's prefatory comments (214). Miller also notes that "the myth of Haworth's cultural remoteness . . . was first established by Charlotte in 1850" and has persisted in shaping readers' assumptions about the ways in which *Wuthering Heights* engages with issues of the day (219). Pauline Nestor, for instance, claims the text is divorced from both literary and social contexts:

Unlike the contemporaneous, industrial novels of Charles Dickens, Elizabeth Gaskell, Benjamin Disraeli and Charles Kingsley, *Wuthering Heights* shows no engagement with wider social issues; its environment is enormously detached. . . . The realm of the Heights and Thrushcross Grange functions as a world unto itself, an exclusive reality for the text, so that when characters leave that world, as

Heathcliff and Isabella do, they seem mysteriously to disappear into a void. (xix) To be sure, the novel's "exclusive reality" does have boundaries; it is framed much like a picture where the action takes place at the Heights or at the Grange, and beyond the borders of these places exists only a marginal haze untouched by the narrative and speculated upon by the readers. The vacuum in which the narrative appears to occur likely contributed to the alienation of readers that Charlotte Brontë described. The sudden intimacy with unfamiliar characters, with their dialect, their dysfunction, their violence, was probably confusing, perhaps unsettling. Additionally, the text's reliance on eighteenth-century romantic and gothic conventions and its setting in the rural moors of northern England at the turn of the nineteenth century distance it temporally, spatially, and socially from the bustling urban centers of Victorian era industrial productivity, technological development, and personal interaction.

Wuthering Heights might, then, initially seem a strange choice for inclusion in a project focused on proto-cinematic technologies and narratives. Despite its fairly healthy afterlife as a text frequently adapted to the screen and other media, there is perhaps at first glance very little to recommend the novel—which seems so entirely cut off from the larger cultural milieu and, in fact, makes no mention of visual technology—to a study of the interplay between proto-cinematic devices and fiction. I suggest, however, that the

novel is bound up in ubiquitous mid-nineteenth-century excitements and concerns related to developments in the science of vision and technologies of seeing. Contrary to the picture painted by Charlotte (and others), Emily Brontë was not wholly hidden away from cultural progress and technological advances; in fact, she and her siblings shared a great interest in viewing and producing art, as Christine Alexander and Jane Sellars have shown. This interest had a strong influence on the Brontës' writing:

Published prints enabled the Brontës to acquire their own skills in drawing and painting; but, more importantly, they enabled the young writers to transpose the subjects and language of pictures into their literary work. . . . For all the Brontës, a knowledge of the visual arts, the habit of reading pictures, and the practice of drawing and painting, were crucial to their development as writers" (Alexander and Sellars 9-10)

Developments in metallurgy and printing allowed for the improved reproduction of engravings and other visual forms, and these images were widely circulated, even in the more remote and rural areas of the country. "There is no doubt that Emily, like her brother and sisters, learnt to draw by copying manuals and popular prints of the day" (Alexander and Sellars 110). Clearly, Brontë's upbringing exposed her to a wealth of artistic visual media that she got into the "habit of reading" and learned to "transpose" into her work. In addition to illustrations and engravings, however, I argue that Brontë responded to and anticipated proto-cinematic modes of viewing photography and, particularly, stereoscopy. Wuthering Heights demonstrated for its contemporary readers a particular method for scrutinizing two- and three-dimensional photographic images, and my analysis of the novel offers a new way of reading Brontë's novel as one that not only

engages in wider cultural affairs, but also prepared Victorian readers for a unique kind of viewing practice that was on the rise in the mid-nineteenth century.

The binocular perspective and three-dimensionality of stereoscopic views are also present in Wuthering Heights. Like Mary Shelley in Frankenstein, Brontë constructs a layered narrative by embedding the words of housekeeper-storyteller Nelly Dean into the über-narration of the visiting tenant of Thrushcross Grange, Mr. Lockwood. Rather than employing an epistolary technique, however, Brontë presents the whole of the narrative as Lockwood's private journal or personal papers, spanning the course of about one year between the winters of 1801 and 1802. Obviously, the multiple narrator, or layered, structure was not an unprecedented strategy at the time of Wuthering Heights's composition (autumn 1845 to summer 1846), but I contend that Brontë's use of the narrative framing device had decidedly new and evidently discomfiting effects for midcentury readers (as evidenced by the initial reception of the novel). The unsettling novelty of the work is generated by the narrative adaptation of the effects of the stereoscope, first developed by Sir Charles Wheatstone in the early 1830s. The union of Nelly's narration with Lockwood's variant view of things creates a stereoscopic effect—a depth—that reflects a wider cultural shift in the scientific knowledge of vision and the creation of technological apparatus, such as the photographic camera and the stereoscope, that rely on such knowledge. Lockwood's misanthropic urbanity infiltrates the rural moors of England, becoming a fixture there in a manner akin to the spread and establishment of the

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² Lockwood claims to preserve Nelly Dean's tale "in her own words, only a little condensed. She is, on the whole, a very fair narrator and I don't think I could improve her style" (Brontë 156). He is somehow also able to reproduce several other texts, including a significant amount of Cathy Earnshaw's marginalia and a lengthy letter from Isabella Linton/Heathcliff to Nelly.

photograph and the stereoscope from cities like Paris and London to Emily Brontë's home in Haworth.³ I argue that the novel, the substance of which is composed, captured, and fixed by Lockwood, functions like an uncanny stereoscopic view and that, in so doing, it reflects the patterns of technological and literary change that I have been exploring. Just as the previous chapter argued for Dickens's use of thaumatropic narrative, so this chapter asserts that Brontë similarly relied on, even anticipated, optical phenomena and visual apparatus in conceptualizing her text. In emphasizing points of view, as well as various forms of visual and narrative framing, Brontë extends the metaphorical use of the phenomenon of persistence of vision, as discussed in the previous chapter, and also incorporates fictional representations of binocular vision, a physiological topic of interest to Victorian scientists and a physical requirement for human perception of depth and three-dimensionality.

Wuthering Heights acts as a site in which the marginality of characters might be read in photographic and stereoscopic terms. While multiple narrator novels often invite scholarly approaches that rely on narrative theory, I suggest a more specific engagement with the particulars of how the novel emphasizes sight, or what narratologists would call focalization, in relation to visual technology. The union of Nelly's particular perspective

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³ As mentioned earlier, there persists an idea, like the view of Emily Brontë herself, that Haworth was completely isolated. Lucasta Miller suggests that this is likely a holdover not only from Charlotte's 1850 Preface, but also "from Gaskell's exaggerated portrait of Haworth as a culturally deprived outpost on the farthest fringes of civilization" (245). As evidenced by mid-nineteenth-century photographs taken of the parsonage, however, visual technologies had made their way to the town. See, for example, images on The Brontë Society's "Picture Library." The ambrotype of the Parsonage, the earliest known image, is estimated to date from the mid-1850s, per a 22 June 2016 personal email correspondence with Sarah Laycock, the Society's Library and Collections Officer. Although this timeframe occurs after Emily Brontë's death, it seems highly likely that she and her family were well aware of such photographic possibilities during her lifetime.

and Lockwood's variant view of things—the absorption of the former into/by the latter—creates a stereoscopic effect that both surrounds us and repels us with a richly textured world that is oddly unsettling—and un*settled*. Although its publication occurred prior to the widespread commercialization and popularity of the handheld stereoscope, Brontë's novel participates in the dissemination of new viewing practices and anticipates the experience of stereoscopy.

Photographic and Stereoscopic Marginality

I presented in Chapter I an overview of the development of photography and stereoscopy and in doing so mentioned Oliver Wendell Holmes, who wrote quite extensively on the effect of stereoscopic viewing. In order to frame my reading of *Wuthering Heights* and the way it contributed to such viewing practices, it is necessary to return briefly to Holmes and his 1859 essay "The Stereoscope and the Stereograph," in which (a decade after the publication of Brontë's novel) he describes at length his experience with a number of stereoscopic images. He is, for instance, particularly struck by differences between the two images comprising a stereograph, by presences and absences that mark the movement of people and the passage of time:

We have often found these incidental glimpses of life and death running away with us from the main object the picture was meant to delineate. The more evidently accidental their introduction, the more trivial they are in themselves, the more they take hold of the imagination. It is common to find an object in one of the twin pictures which we miss in the other; the person or the vehicle having moved in the interval of taking the two photographs. (152)

Apparently scrutinizing each individual photographic image included on a stereograph, Holmes notes distinctions between the two and observes that the moving realities of time and space had occurred during the making of the two photographs. It is precisely these minute details that fascinate Holmes, who goes on to describe some particular examples, notably using present tense in reading the image/s (as is customary for literature scholars):

There is before us a view of the Pool of David at Hebron, in which a shadowy figure appears at the water's edge, in the right-hand farther corner of the right-hand picture only. This muffled shape stealing silently into the solemn scene has already written a hundred biographies in our imagination. In the lovely glass stereograph of the Lake of Brienz, on the left-hand side, a vaguely hinted female figure stands by the margin of the fair water; on the other side of the picture she is not seen. This is life; we seem to see her come and go. All the longings, passions, experiences, possibilities of womanhood animate that gliding shadow which has flitted through our consciousness, nameless, dateless, featureless, yet more profoundly real than the sharpest of portraits traced by a human hand. (152-53)

As mentioned previously in relation to the twentieth-century View-Master, Holmes seems to take control over or agency from these "shadowy" and "vaguely hinted" human figures by visually consuming them and conjuring their lives—even genders—and stories. However, these and other "muffled shape[s]" appearing at the edges and margins (calling to mind both spatial and textual uses of the word) of stereoscopic images arrest and possess Holmes in far more powerful ways. Despite their anonymity and marginality, like Nelly Dean and other characters in *Wuthering Heights*, the figures claim our

attention and spin tales that keep us enraptured and force us into contemplation. A Nancy M. West notes that the minor elements over which Holmes obsesses function as Barthes's punctum, the unintended details of a photograph that cannot be ignored precisely because they remind the viewer of mortality (246). For Holmes, the "possibilities" of these details also "animate" the marginal figures, who seem to be "gliding" rather than fixed in their positions, as might be expected because of the nature of individual photographs.

Stereographs and stereoscopic viewing thus had the potential to encourage philosophical thought, narrative meaning-making, and kinetic contemplation. More intriguing still, perhaps, is considering how the actual experience of perceiving images with the aid of a stereoscope is a visual act that produces rather gothic effects in terms of a slippage between objectivity and subjectivity.

Regardless of the model, the effect of peeping into a stereoscope is much the same: two photographs of a subject or scene, taken from slightly different angles, unite into one "solid" picture. A layering of points of view occurs which, while nearly imperceptible physiologically, is nevertheless a psychologically disorienting experience. The viewer can feel oddly removed from her body and tumbled into the encompassing but somehow still intangible, the apparently real and living yet somehow always fixed and immobile scene before her. Stereoscopic views have the ability to make us feel Other, as though we are intruding upon the scenes. This sensation is probably intensified

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⁴ Emily Brontë, herself, is for us very like these shadowy figures on the margins. She fascinates us but remains mysterious, so we construct various narratives (even myths) about who she was. Lucasta Miller's metabiography, *The Brontë Myth*, beautifully describes how looking at Emily's few remaining pieces of writing "give tiny glimpses . . . which bring the dead momentarily to life. . . . giv[ing] us the illusion of recovering the past, but also show[ing] us what we've lost" (187). Miller's textual experience is eerily similar to Holmes's stereoscopic viewing.

by for us today by the age and sometimes the content of extant stereographs (and photographs): "Her Guradian Angel," for instance, is replete with elements that present the quality of the punctum (Figure 13).



Figure 13. "Her Guardian Angel."

Stereograph from author's personal collection. One end of the card reads "Keystone View Company; copyright 1898 by Manufacturers B.L. Singley, Made in U.S.A. Publishers," while the other end reads "Meadville, Pa., New York, N.Y., Portland, Oregon, London, Eng., Sydney, Aus." The back of the stereograph features several lines from a lullaby by Paul Lawrence Dunbar, as well as a short narrative constructed about the stereoscopic image depicted.

This example makes use of double-exposure techniques to create the eerie spirit or angel hovering with arms extended over the child awake in the bed. The effect of viewing this stereograph now (and I imagine for late-nineteenth-century viewers) is quite discomfiting. We cross the thresholds of time and space as though we are some of the

marginal, shadowy figures Holmes describes. We are, in a sense, the ghosts haunting the Victorian period from our vantage point in the present even as we occupy the marginal participatory role of figures in the past's captured and continued presence. The past is made complex, three-dimensional, and seemingly solid for us even now if we explore it through a stereoscope. Despite the solidity, however, there is always the sense of objects shifting. In the example above, for example, the curtains draping the picture on the wall and the spirit's garment appear to shiver slightly, as though a latent kinetic energy is asserting itself through the depth we perceive in the combined static images.⁵

"The effect of solidity" achieved with a stereoscope is, as Holmes asserts, "so heightened as to produce an appearance of reality which cheats the senses with its seeming truth" (140). Indeed, the effect can be somewhat violent and horrifying, as Holmes notes:

The mind feels its way into the very depths of the picture. The scraggy branches of a tree in the foreground run out at us as if they would scratch our eyes out. The elbow of a figure stands forth so as to make us almost uncomfortable. Then there is such a frightful amount of detail, that we have the same sense of infinite complexity which Nature gives us. A painter shows us masses; the stereoscopic figure spares us nothing . . . (148)

Even as we mentally touch our way to the interiority of the apparent three dimensions of the pictured subjects, details of the image spring at us in a nightmarish manner. The near-

⁵ Here I draw largely on my own experiences in viewing a range of stereographs, many of which I own and have examined at length, like Holmes. There is certainly something unsettling about perceiving the depth of these images and of feeling transported into them. For me, as for Holmes, there is a simultaneous sense of fascination and horror inherent in the illusion.

tangibility of objects and figures can be discomfitting, even threatening, and the effect of seeing depth makes us imagine motion as things "run out" or "stand forth."

In Wuthering Heights, frequent emphasis is placed on characters focusing on what exists on the margins, constructing meaning from that marginalia, and experiencing almost tangible results of the visual. Perhaps the most disconcertingly moving stereoscopic scene occurs early in the novel, when Lockwood penetrates the heart of the Heights and must pass the night in Catherine Earnshaw's chamber and the strange bed within. The description of this unusual piece of furniture is a highly suggestive moment in terms of how the text mediates a stereoscopic effect. The "structure" is "a large oak case, with squares cut out near the top, resembling coach windows" (Brontë 19). Calling to mind both books ("oak case") and vehicles ("coach windows"), this "conveniently designed" space also seems very like some models of the stereoscope and, furthermore, akin to the photographic camera required to produce the stereographs one would view with a stereoscope (19). Constructed from wood, the "little closet" not only contains an "old fashioned couch," but it also encloses a window, the ledge of which "served as a table," and features "panelled [sic] sides," which slide open and closed, recalling Wheatstone's design (19). Catherine's bed and desk are housed within a large-scale hybridization of camera and stereo viewer, complete with square lens-like openings and a window serving as both light source and reflective surface. Once inside this visually defined space, Lockwood discovers that the window ledge is "covered" with variants of Catherine's name etched into the paint, and these "characters" imprint themselves upon Lockwood's retinas (19). Shortly after he closes his eyes, "a glare of white letters started from the dark, as vivid as spectres – the air swarmed with Catherines" (20). In some ways

this scene is reminiscent of Victor Frankenstein's phantasmagoric dream and the magic lantern-like projection of his moving creature. There is also a hint toward photographic technology, however, as Lockwood provides us with a depiction of the negative effects resulting from his continued exposure to Catherine's various signatures. The white letters on the dark background of his eyelids present us with a photographic negative of print media, the ghostly vividness of which is, furthermore, indicative of the stereoscopic effect of depth and solidity that is almost tangible. The bee-like swarming of Catherines suggests that Lockwood is immersed in a discomfiting vision, the proximity of which rouses him "to dispel the obtrusive name" (20). Lockwood's experience of simultaneously looking at and being in the swarm is very like Holmes perceiving movement in marginalia and threat in dimensionality. The violently moving letters, visible to Lockwood in the negative hue, seem also to be the result of persistence of vision. Wheatstone describes one of his experiments with the stereoscope in the following, perhaps now familiar terms:

If [two images of circled letters] are each presented at the same time to a different eye, the common border will remain constant, while the letter within it will change alternately from that which would be perceived by the right eye alone to that which would be perceived by the left eye alone. At the moment of change the letter which has just been seen breaks into fragments, while fragments of the letter which is about to appear mingle with them, and are immediately after replaced by the entire letter. It does not appear to be in the power of the will to determine the appearance of either of the letters, but the duration of the appearance seems to depend on causes which are under our control . . . (386)

Here, the phenomena of persistence of vision and binocular vision merge, as the two different letters attempt to merge in an almost hallucinatory effect very similar to Lockwood's experience in visualizing language.

As the scene continues, the stereoscopic quality of the narrative intensifies due to the allure of what exists on the margins. Lockwood discovers other forms of writing to keep himself occupied; he skims through Catherine's library and reads portions of her ample marginalia. Significantly, and again like Holmes, the marginal material (Catherine's writing and even "an excellent caricature of . . . Joseph") draws Lockwood in and captures his imagination: "An immediate interest kindled within me for the unknown Catherine" (Brontë 20). As Lockwood observes the interiors of Catherine's books, he perceives her as a shadowy, mysterious figure at the edges; she is for him "a vaguely hinted female figure stand[ing] by the margin," the "muffled shape stealing silently into the solemn scene" set by the published texts (Holmes 152). In an effort to establish an initial narrative about her, Lockwood "began, forthwith, to decypher [sic] her hieroglyphics" (Brontë 20). While Lockwood's diction reiterates his earlier observation of Catherine's handwriting as "unformed, childish," it also identifies her writing with the pictorial (20). Thus, in translating her, Lockwood is reading the visual; he is constructing his narrative of her more from image than text. The dream sequence that follows his perusal of Catherine's books is profoundly stereoscopic, merging bits and pieces of dry Jabes Branderham's printed sermon with impressions and extrapolations of rebellious Catherine's youthful scrawl in a nightmarish vision that conflates reality and illusion. For Lockwood, waking reality and dreamt fantasy become one; the depth of the illusion becomes so totalizing that he can apparently touch the intangible. Presumably hearing an

actual branch scratch the window of his enclosure, he attempts to curb the noise, though consciously aware the latch is stuck: "'I must stop it, nevertheless!' I muttered, knocking my knuckles through the glass, and stretching my arm out to seize the importunate branch: instead of which, my fingers closed on the fingers of a little, ice-cold hand!" (Brontë 25). This tactile contact—the feeling of touching an unseen body—intensifies Lockwood's fear. Touch and terror reach a violent climax, however, when Lockwood sees "obscurely, a child's face looking through the window . . . I pulled its wrist on to the broken pane, and rubbed it to and fro till the blood ran down and soaked the bed-clothes" (25). This image, horrific both for Lockwood and for readers in its seeming solidity and tangibility is a textually mediated stereoscopic experience, one that is akin to Holmes's descriptions of the "frightful amount of detail," such as the scratching "scraggy branches of a tree," contained in many stereographs (148). Significantly, too, the waif is relegated to the outside fringes; she is an "obscurely" seen figure with which Lockwood makes contact. To refer once again to Crary, the language of this scene transforms the tangible into the purely visual. Brontë's stereoscopic narrative works to shift us, like Lockwood, from an objective position as the outsider looking in to a disorienting interiority where everything swarms about us.

Lockwood's dream scene is often discussed through the lens of psychoanalytic discourse and/or the Gothic. To be sure, such readings are not incompatible with my own, which privileges the crossing of textual boundaries by visual media. Nineteenth-century developments in the understanding of the human eye and its functioning led to the construction of devices that were capable of producing simultaneously pleasing and unsettling effects and potentially expanded the possibilities for constructing horror. The

Victorian Gothic is already bound up in psychological and visual anxieties, some of which were clearly made manifest by the stereoscopic image (as evidenced by Holmes's writing). Indeed, in quite gothicized terms Crary calls stereoscopy the embodiment of "a derangement of the conventional functioning of optical cues" (Techniques 125). In the case of Wuthering Heights, such derangement seems to occur with some frequency for Lockwood. It is a critical commonplace to read Lockwood as a poor interpreter of cues in his surroundings, as he consistently misconstrues what he sees (like the dead rabbit pile, which he perceives as a live kitten pile). In my analysis, however, Lockwood's errors point less to his bumbling inability to correctly identify things and more to his Holmeslike obsession to construct narrative meaning for what exists on the periphery. It is Lockwood's stereoscopic dream that leads him to prompt Nelly Dean's storytelling during which, significantly, Lockwood's own narrative is relegated to the margins of the novel's structure. His point of view becomes stereoscopically positioned alongside, over, and beneath the perspective of Nelly, who serves as the "overseer" or perpetual eyes (and ears) for three generations—or dimensions—of Earnshaws.

Several previous studies of Brontë's novel share an implicit acknowledgment that Nelly's role as narrator creates a barrier to our understanding of *Wuthering Heights* and tests our interpretation of her perspective, which is often formed from a vantage point at the threshold of doors or windows, at the margins of the action she describes. In "Nelly Dean and the Power of *Wuthering Heights*," for instance, John K. Mathison argues that

Nelly is an admirable woman whose point of view, I believe, the reader must reject. . . . When the reader refuses to accept her view of things, which he [or she] continually does and must do, [s/]he is forced to feel the inadequacy of the

normal, healthy, hearty, good-natured person's understanding of life and human nature. [S/]he is consequently forced into an active participation in the book. (107)

For Mathison, all of Nelly's positive qualities make it difficult for us to disagree with her, but we must ultimately take an active role in interrogating her narrative for the ways in which it fails to fully explain the goings on at Wuthering Heights and Thrushcross Grange. Via Nelly, "the reader's reaction is . . . a realization that the 'normal' person is often incapable of feeling for the tortured, emotionally distraught person" (Mathison 109). Similarly, Ivan Kreilkamp asserts that "Nelly comes to play the role of unfeeling witness who sees suffering but fails to understand it, and who is quick to draw distinctions of 'species' to distance herself from pain" (104). It is through Nelly, to whom readers feel superior, Krielkamp argues, that "the humane reading subject [is defined] as he or she who can most strongly feel the pain of the animal on the operating table, most powerfully respond to the force of that 'bloody spectacle'" (106). In a discussion of the gaze in *Wuthering Heights*, Beth Newman suggests that, as

the oldest woman in two motherless households, she acts more as guardian than as housekeeper. . . . Nelly watches on behalf of men while seeking to remain outside the circuit of desire. So long as she succeeds in banishing her own desire from the consciousness of the other players, she is an excellent spy, an effective policing agent for the families who employ her. (1034-35)

Unlike Lockwood, who is generally assessed as the misanthropic outsider who doesn't rightly understand anything, Nelly has been subjected to a variety of readings. She is a simple matronly gossip, a bird-like mother hen, a detached witness who lacks empathy, a

piece of surveillance equipment, even something of a prototypical Sherlock Holmes. These readings cast Nelly in ways that enrich our understanding of the novel, but they fail to address why the character so fascinates us. As in a stereographic image, it is precisely Nelly's perspective from the fringes of the larger subject that forces us to look at her and look again, constructing new meaning to explain her shadowy motivations and marginal movements. We take that active participation noted by Mathison not to undo Nelly's version of things, but rather to more clearly see how her presence (or absence) at the margins affects and distracts our view of the whole. Nelly thus continues the immersion and fascination with marginal characters that readers have already begun to experience through Lockwood and his stereoscopic dream. Nelly's narration draws us deeper into the unsettling picture of the Heights, framing for us the image of this unfamiliar place and its people.

The Victorian Literary Studies Archive Hyper-Concordance indicates the word "frame" or some variation of it occurs at least eighteen times in the text. Nearly all uses of these words occur during Nelly's narration, highlighting her consciousness of her position on the borderlands of the families. She is keenly aware of herself both as a marginal figure and a container, a shaping device, a picture holder. The term also indicates her understanding of the importance of composition, point of view, positioning, and visuality. She paints for Lockwood a portrait of the current and former inhabitants of both Wuthering Heights and Thrushcross Grange, and she is the one to draw Lockwood's (and readers') attention to the presence—and absence—of actual portraits of Edgar Linton and Cathy Earnshaw Linton: "He was my late master; that is his portrait over the fireplace. It used to hang on one side, and his wife's on the other; but hers has been

removed, or else you might see something of what she was. Can you make that out?"
(Brontë 66-67). We later learn that Heathcliff insists he will have Cathy's portrait: "He bid me [Nelly] be silent, and then, for the first time, allowed himself a glance round the room, and a look at the pictures. Having studied Mrs Linton, he said—'I shall have that at home. Not because I need it, but—'" (288). Although the portraits are not photographs (the temporal setting of the novel and the size of the objects would make that ridiculous) there is nevertheless the suggestion of photographic and/or stereoscopic viewing here, whereby Heathcliff's focus is drawn to one side, to one image. The connection between the two portraits of man and wife, of the different images belonging together on the wall, is severed when Heathcliff removes Cathy's picture. Lockwood, thus, is not able to see with his own eyes the likeness of and the other point of view presented by her image; he must continue to rely on his own imaginings and Nelly's narrative to flesh out her story.

Another such severing of paired images occurs when Linton Heathcliff (the weakling offspring of Isabella Linton and Heathcliff) describes the behavior of young Catherine (daughter of Cathy Earnshaw and Edgar Linton) shortly after their enforced marriage:

she cried, and took a little picture from her neck, and said I should have that – two pictures in a gold case – on one side her mother, and on the other, uncle, when they were young. That was yesterday – I said *they* were mine, too; and tried to get them from her. [...] [S]he broke the hinges, and divided the case and gave me her mother's portrait; the other she attempted to hide; but papa asked what was the matter and I explained it. He took the one I had away, and ordered her to resign

hers to me; she refused, and he – he struck her down, and wrenched it off the chain, and crushed it with his foot. (280-81)

Here again, Heathcliff is involved in dismantling the union of pictures of Cathy and Edgar, but the scene is instigated by his son, which is fitting for this miniature version of the larger wall portraits. Significantly, Linton first describes the desired item singularly as "a little picture," then seems to revise his thinking and describes "two pictures in a gold case." On the one hand, the unhinging of the larger subject represented by the two images suggests that, like his father, Linton sees through and negates the illusion of union between Cathy and Edgar. The removal of Cathy from the pairing of images deconstructs the effects of seeing them merged and denies the solidity and depth of the reality of their union. On the other hand, the severing of the pictures by both Heathcliff and Linton implies a desire to maintain Cathy as the sole subject of perception, to eradicate the distractions, fascinations, and horrors of details, minutiae, and figures at the margins of the view (i.e., Edgar). After her death Cathy herself becomes the veiled, shadowy, marginal figure, and Heathcliff's hoarding of her pictures suggests his need to bring her back into full view and control the prominence of her place in his sight.

Heathcliff's persistence of vision relates only to Cathy, and he thus attempts to spurn the binocularity posed by the side-by-side images. Nevertheless, in so doing a stereoscopic effect returns, as Nelly relates in the penultimate chapter of the novel. Heathcliff tells her that "there is a strange change approaching – I'm in its shadow at present" (Brontë 323). Some new, but still hazy, thing on the margins is moving toward Heathcliff, looming stereoscopically closer to him even as he himself is a veiled presence

at its fringes. He goes on to describe to Nelly his troubled mind and hints at his loss of control over Cathy's two-dimensional image (as represented by the severed portraits):

[W]hat is not connected with her to me? and what does not recall her? I cannot look down to this floor, but her features are shaped on the flags! In every cloud, in every tree – filling the air at night, and caught by glimpses in every object, by day I am surrounded with her image! The most ordinary faces of men, and women – my own features – mock me with a resemblance. The entire world is a dreadful collection of memoranda that she did exist, and that I have lost her! (323-24)

Very like Lockwood at the beginning of the novel, for whom "the air swarmed with Catherines," Heathcliff in the end is "surrounded" by her (20). For him, the three-dimensionality and near-tangibility is not textual but solely visual, in that he sees not the letters of her name around him, as Lockwood does, but "her image." There is, perhaps, less threat posed to Heathcliff, as well, for the encompassment he experiences is not so violently insect-like, but instead overwhelmingly totalizing. To be sure, everything he sees causes him grief; "the entire world" contains details that for Heathcliff are the punctum that force him to contemplate loss and death.

Indeed, the approaching change he notices is likely his own demise. In the novel's final chapter, the narration is returned to Lockwood, who learns during his last visit to the Heights how Nelly found Heathcliff "dead and stark!" and "tried to close his eyes – to extinguish, if possible that frightful, life-like gaze of exultation" (335). Significantly, "they would not shut," as though even in death Heathcliff continues to perceive his surroundings (335). His burial alongside Cathy—"the scandal of the whole neighbourhood"—positions him finally in union with her (336). The three bodies (Cathy,

Heathcliff, Edgar) deteriorating beneath the sod are relegated to the invisible margins of view, but nevertheless continue to elicit fear and fascination for locals and for Lockwood. "A little boy," for example, "crying terribly" tells Nelly he has seen the ghosts of "Heathcliff and a woman, yonder, under t' Nab" (336). In the closing words of the novel, Lockwood in contrast "wonder[s] how any one could ever imagine unquiet slumbers, for the sleepers in that quiet earth" (337). The buried figures exert power in that they pull attention and invite the creation of sights and stories, once again recalling Holmes's descriptions of the details residing at the margins of stereographs. The multiple narrator structure of the novel establishes for us the two views, but it is the wealth of textual detail offered in each narrative that presents us with the opportunities to flesh out the marginal.

Conclusion: Embracing Depth

Nancy Armstrong's *Fiction in the Age of Photography: The Legacy of British*Realism (1999) considers Brontë's novel as exemplary of how "fiction, folklore, and photography together brought the same power to bear on the native people and customs of the British Isles that spirit photography used to dematerialize women" (175) and "rethink[s] the novel's self-enclosure in terms of the sweeping displacement of local kinship systems by a mass classification system grounded on visual differences" (178).

Armstrong does not, however, read the novel as influenced by or participatory in photography or stereoscopy; instead she reads its conclusion, its initially poor reception, and its subsequent popularity after Charlotte Brontë's Preface to the 1850 edition as parallel to the identity-stripping, miniaturizing, and marginalizing effects that mass photography would eventually have on its subjects (most of the photos Armstrong includes are post-1850). As I have demonstrated, however, the novel's engagement with

photographic and stereoscopic viewing practices provides identity in that it demands attention to and treatment of the marginal. Reading the novel as one that requires our attention to the marginal allows us to recognize more clearly how the novel and its characters function, and perhaps why it is often considered such a difficult book to pin down and make sense of.

Lucasta Miller acknowledges that "the novel resists certainties at every level," and this resistance, I suggest, is due to the photographic and stereoscopic effects at play in the work. The main subject of the composition seems, at first, obvious enough: the star-crossed love of Cathy and Heathcliff. This basic picture, however, is overwhelmed by everything and everyone mingling around it. We are constantly distracted by minutiae, and our energies turn toward the making of meaning in relation to the marginal. We become, for instance, more interested in Cathy when she is beyond Nelly's purview, recuperating from the dog bite at Thrushcross Grange; we imagine narratives to explain what Heathcliff was up to while away for years. I, for one, find Wuthering Heights to be a very different book with each reading, largely because some unnoticed detail stereoscopically flings itself at me and must be seen, must be taken stock of. Known for its "mixing of genres" (Pykett, par. 6), Brontë's novel is, as I have shown, a text that also dabbles in the mixing of Victorian media. By providing us with one lens and picture through Lockwood, representative of masculine urbanity, and another via Nelly, representative of feminine rurality, Brontë pushes us into the stereoscopic heart of the novel where we find "both pleasure and pain" in what we are encouraged to visualize through the rich and sometimes overwhelming narrative (Brontë 331). Reading Wuthering Heights as a photographic and stereoscopic narrative creates new possibilities

for interpreting how the novel constructs narrative perspective, portrays characters' impeded dynamism, and uses imagery to draw readers into a very real and generally disorienting interactive relationship with the text.

CHAPTER IV – "I WONDER IF ALL THE THINGS MOVE ALONG WITH US?"

DREAMING OF ANIMATION

IN LEWIS CARROLL'S ALICE BOOKS

Still she haunts me, phantomwise, Alice moving under skies Never seen by waking eyes.

Life, what is it but a dream?

—Lewis Carroll (1871)¹

Like the spirit of Cathy Earnshaw in *Wuthering Heights*, Lewis Carroll's Alice is a haunting, moving presence, a figure that visits and revisits us "phantomwise," lingering in our lives just as the real Alice Liddell did for Carroll. Indeed, even our perception of the real Charles Dodgson has been haunted by both Alices, as well as by the pseudonym itself, contributing to what Karoline Leach calls the "Carroll Myth," the stifling notion that Dodgson is fully known, mainly as an unworldly clergyman obsessed with little girls.² As Leach demonstrates, however, the realities of Dodgson's life were far more complex than the myth would have us assume, and his writing, too, reveals much more than comical nonsense, as many scholars have pointed out. The Alice books are, for

¹ Lewis Carroll, *Through the Looking-Glass and What Alice Found There* (Vancouver: Engage Books, 2010) 223 (lines 10-12), 224 (line 21). I begin with the fourth stanza of the poem and ellipse two full stanzas and the first two lines of the final stanza here. Rather than standard ellipses, I borrow the pattern of asterisks used in the narrative to indicate Alice's crossing into new squares of the Looking-Glass landscape.

² Leach first introduced the concept of the "Carroll Myth" in her monograph *In the Shadow of the Dreamchild: A New Understanding of Lewis Carroll* (1999), which was revised and republished in 2009 as *In the Shadow of the Dreamchild: The Myth and Reality of Lewis Carroll*. Throughout this chapter, I use "Dodgson" rather than "Carroll" in order to continue the work of myth-busting.

instance, exemplary of Dodgson's engagement with Victorian visual culture, reflective of his well-known interest in photography and, I argue, participatory in the evolution of the moving image in that they encouraged contemporary readers to contemplate and interactively construct animated pictures.

An Alice always in rhythmic motion seems to have inspired Dodgson in multiple ways. In 1862 Dodgson spent a now-famous afternoon on a boating trip in Oxford in the company of the three daughters of his friend Henry Liddell. The Liddell children, especially Alice, begged for a story during the excursion, and the tale that Dodgson told them and later drafted into a preliminary manuscript served as the motivation for *Alice's* Adventures in Wonderland (1865). The boating trip was for Dodgson a significant event to recall when memorializing Alice Liddell in prefatory verses to both Alice's Adventures and Through the Looking-Glass and What Alice Found There (1871) as well as in a closing verse to *Through the Looking-Glass*.³ All three of the poems reference the boating excursion and dwell on memory, dreams, vision, and motion, making them relevant to my examination of how Dodgson's work was both influenced by and influenced visual technology. The poems, each with a particular rhyme scheme and meter that emulates the cyclical movement of water or the rowing of a boat, become progressively more elegiac but also suggestive of a slippage of the boundary between fact and fantasy, between the Alice of Oxford and the Alice of Wonderland. Taken together, the poems trace a trajectory of how reality becomes illusory and vice versa.

From one prefatory poem to the next, an erasure occurs between the subject of the stories and the addressee of the verses. The first of these poems celebrates the creation of

³ All three poems are included in full in the Appendix.

the tale and "The dream-child moving through a land / Of wonders wild and new" and finally requests that the real Alice accept the story "And with a gentle hand / Lay it where Childhood's dreams are twined / In Memory's mystic band" (Wonderland 21-22, 38-40). A clear distinction between "the dream-child" and the "Alice!" (37) of inspiration seems evident in this first poem, as is the line between the story itself and its gestation, how "its quaint events were hammered out" (33) during that day on the river "All in the golden afternoon" (1). In the second of the prefatory verses, the speaker appeals to a "Child of the pure unclouded brow / And dreaming eyes of wonder!" in hopes that she "wilt not fail / To listen to my fairy-tale" (Through 1-2, 11-12). Readers may well identify with the unnamed child, but the diction of these lines also establishes an overlapping of Alice the dream-child in Wonderland and Alice Liddell. The poem goes on to recall, once again, the Oxford trip when the story was "A simple chime, that served to time / The rhythm of our rowing" (15-16), which obscures the specificity of the event present in the first poem. The final stanza cautions that "the shadow of a sigh / May tremble through the story, / For 'happy summer days' gone by, / And vanish'd summer glory—" (31-34). These lines lament the passage of time and acknowledge how yearning for a past reality becomes entangled in the construction of fiction, further conflating the Alices and blurring the boundaries between the real and the imagined. There is, perhaps, the implication in this poem that the Alices are becoming merged for the speaker due to separation: "I have not seen thy sunny face, / Nor heard thy silver laughter" (7-8). Writing the narrative of one Alice may have given Dodgson the perceived reality of proximity to the other, bringing the real child into view and animating her with life.

The blurring of lines between the Alices and between reality and fantasy is most apparent in the final poem that closes Through the Looking-Glass, from which the epigraph above is taken. In the first three stanzas, the speaker again romanticizes the river excursion on "A boat . . . / Lingering onward dreamily" (1-2) with his original live audience of Liddells, the "Children three that nestle near, / Eager eye and willing ear" (4-5). He remarks dolefully on the passage of time, noting that "Echoes fade and memories die: / Autumn frosts have slain July" (8-9). Following the mournful, even violent, imagery of these lines, the speaker fixates on the spectre-like "Alice moving under skies / Never seen by waking eyes" (11-12). This Alice is simultaneously the real and the fictitious, the memory of the former produced only in dreams and the actuality of the latter realized by imagination. Central to the poem, both structurally and thematically, this stanza shifts from the first half of the verse with its emphasis on past events and memory to the second half in which imagined tales and dreams are always already a continuing reality: "Children yet, the tale to hear, / Eager eye and willing ear, / Lovingly shall nestle near" (13-15). These lines recall the earlier stanza referencing the Liddell children, and the "yet" implies that there is some realm or dreamscape in which they remain as they were on the boat, still ready to have their story again and again. At the same time, these lines imply that the tale will continue to please other youngsters, who will live in their own Wonderlands, "Dreaming as the days go by, / Dreaming as the summers die" (17-18). Although time's passing is inevitable, the acts of remembering and of dreaming become entwined and continue indefinitely. The final, interrogative line of the poem—"Life, what is it but a dream?" (21)—completes the conflation of reality with dreams or fantasy, significantly asking readers to agree with the conflation. Whether young or old, we are prompted to consider the illusory nature of life and the way memory allows us to play and replay both fact and fiction.

Taken together and in sequence, severed from the prose narratives they accompany, these poems reveal not only the process by which memory becomes hazy and dreamlike with time, but also how dreams and the products of imagination can just as readily become lifelike and real. Readers are thus encouraged to celebrate imagination and allow the illusory worlds of Wonderland and Looking-Glass Land to come fully to life. The erasure of the distinction between the Alices in the second of the prefatory poems also seems designed to help readers themselves become children "with dreaming eyes of wonder!" who move on the water in Oxford, in the world of Wonderland, and through the chessboard of Looking-Glass Land. Each new generation of readers becomes part of an on-going cycle of interaction with books that themselves enact repeated cycles. This chapter demonstrates that the interactive qualities of the Alice books, which are created through the combination of text and illustration, position them along the continuum of Victorian-era optical toys, particularly those toys that generated the animation of images, such as the phenakistiscope, zoetrope, and praxinoscope. The Alice books, I argue, participated in the proto-cinematic "cultural series" of animation or "animated pictures" to use André Gaudreault's terms (26).

As I will show, the interactivity required by optical toys that created animated pictures, the participatory construction of animated pictures, is also a potential role of readers of the Alice books. Many of Dodgson's contemporary readers, in fact, had clearly already begun to take pleasure in seeing—in bringing—pictures come to life, and from their initial dissemination in the 1830s, phenakistiscopes continued to be widely

distributed well into the latter decades of the nineteenth century. Indeed, many of the surviving examples of phenakistiscope discs feature subjects that would be right at home in Wonderland or Looking-Glass Land (Figure 14). In addition to discs showing figures engaged in some activity like dancing, eating, or tumbling, a number of discs depict kaleidoscopic patterns of shapes that grow and shrink, swirl about, or morph, and these are almost hallucinogenic in their movements—a strategy later used in several screen adaptations of the Alice books.⁴



Figure 14. Phenakistiscope discs, c. 1833.

The disc on the left was part of Mclain's Optical Illusions or Magic Panorama set of twelve lithographs distributed in Great Britain.

The disc on the right was one of a set of six distributed in Great Britain as the Fantascope; Magic Panorama. Images and information from The Richard Balzar Collection ("Phenakistascopes" [sic]).

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⁴ To view the effects of various discs in motion, see "Phenakistascopes" [sic] and Jobson. Similar effects can be seen in Jonathan Miller's 1966 made-for-TV film, *Alice in Wonderland*, which likely initiated the more psychedelic treatments of the books that tend to play up the smoking caterpillar and the eating of mushrooms. Perhaps the most visually "trippy" strategies have been used in the 1971 American-made anti-drug PSA titled *Curious Alice*, which incorporates startling, almost sickening, animation sequences that recall some phenakistiscope discs.

In light of the Alice books, the above are quite interesting examples: the bodiless queen on the left continuously eats what appears to be a thief with a sack of booty, calling to mind the Queen of Hearts, who constantly calls for beheadings and faces a tart-thief.

The rotund man on the right spins in an endless drunken dance, anticipating in some ways both Humpty Dumpty and the Tweedles.

Contextualizing Alice

Certainly, Alice has consistently captured both reading and viewing audiences since the publication of the original texts, each of which featured a generous number of illustrations by John Tenniel (forty-two and fifty, respectively). Like the optical toys discussed here, Alice's iconic presence undergoes adaptation and evolution as she continually finds her way into our world via new conceptualization and media. The character and her dreamscapes have been particularly well suited to screen adaptations, all of which, of course, rely on the animation of still images whether photographic or artistic. From pioneer filmmaker Cecil M. Hepworth's 1903 live-action version of *Alice in Wonderland* to Walt Disney's 1951 animated film classic, from American McGee's interactive *Alice* video games (2000 and 2011) to Tim Burton's tech-savvy *Alice in Wonderland* (2010) and James Bobin's very recent follow-up *Alice through the Looking-Glass* (2016), Alice persists in our "eager eyes and willing ears" (to recall the lines from the closing verse to *Through the Looking-Glass*). In terms of adaptation theory, Alice is a

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⁵ For a fairly recent treatment of Alice's popular manifestations, see Will Brooker's *Alice's Adventures: Lewis Carroll in Popular Culture*. For an earlier but more diverse collection of examinations, see Carolyn Sigler (ed.), *Alternative Alices: Visions and Revisions of Lewis Carroll's Alice Books*. For an intriguing look at the ways in which Alice becomes a figure of both resilience and loss in revisionist texts, see Kali Israel's "Asking Alice: Victorian and Other Alices in Contemporary Culture" in Kucich and Sadoff.

figure whose cultural value seems simultaneously to depend upon and increase with repeated manifestations and innovations. Even as she continues to cross numerous narrative and technological thresholds, however, such emerging possibilities have always been present in her literary origins. Like the slices of Looking-Glass plum-cake that "always join on again," Alice and animated pictures constantly reconnect, and I argue that this phenomenon is due to the narrative and material qualities of the books, which encourage adaptation (*Through* 154). Both as stories and as visual artefacts, the Alice books participated in the shifting visual culture of the latter half of the nineteenth century. The books function as a form of textual optical toy, while also engaging with Victorian photographic practices and looking ahead to cinematic technologies (and the social implications of that progression). As Alice moves from Wonderland to Looking-Glass Land, she moves closer to the world of celluloid and cinema.

Alice has long been popular not only culturally, but also academically. Many scholars have been proactive in reexamining Dodgson's corpus in light of Leach's "Carroll Myth," and a number of critics have addressed the visuality of the Alice books. Several essays in Christopher Hollingsworth's 2009 collection of essays *Alice beyond Wonderland*, for instance, consider Alice's relationship with visual technology by focusing on the ways in which Dodgson's interest in photography is revealed in the Alice books. In "Lovely Gardens and Dark Rooms: Alice, the Queen, and the Spaces of Photography," for example, Stephen Monteiro suggests that "the terms of photography's production and consumption permeate Carroll's Wonderland" (101). For Monteiro, *Alice's Adventures* becomes a narrative space in which Dodgson plays with the tensions arising from the competition between private amateur photography and public

commercial photography by making allusions to his own photographic processes. Similarly, Franz Meier argues for the metaphorical presence of photography in Dodgson's works and further suggests that "this metaphoric subtext creates a 'photographic space' within Wonderland and the Looking-Glass World that is intricately related to surprisingly modern experiences of life and questions of identity" (119). Meier considers not only Dodgson's texts, but also the ways in which John Tenniel's original illustrations work to create photographic space by emphasising frames, two-dimensionality, and subject sizes. For Meier, the visual elements of the Alice books "make the books a highly complex intermedial enterprise" that hybridizes narrative and photography (126). Hollingsworth's own contribution to the collection makes similar claims about the photographic quality of Dodgson's narrative style and suggests that this quality explains, at least in part, the continued popularity of Alice:

[T]he *Alice* books assert a forward-looking improvisational mode of narration that Carroll perfected through entertaining child subjects and manipulating photographs. Viewed in this way, crucial aspects of the persistent and widening appeal and influence of Carroll's classic texts are attributable to the *way* they unfold through a largely unpredictable series of episodes and incidents. It is this aleatory motive (inflected by a specific social and material context) that anticipates and in some respects arguably

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⁶ Meier points out, for example, that at times Alice is the size "of a photographic plate" and "that whenever she grows again, she gets into severe difficulty. . . . Tenniel's illustration for this scene (as well as Dodgson's original drawing) foregrounds this spatial limitation of a frame or box" (120).

undergirds the modernist exploration of mixed media, collage, and assemblage. (85-86, original emphasis)

Dodgson's own storytelling and photographic practices are inextricably linked to—indeed, are embedded within—his style of narration, a seemingly random and episodic style that Hollingsworth views as anticipatory of modernist modes of artistic exploration and creation. While I readily agree that photographic qualities are present in the Alice books and that they anticipate later modes of seeing, I suggest that the narratives also be read for how the episodic structures and illustrations create distinctly proto-cinematic effects that combine the possibilities presented by Victorian animated picture devices and photographic processes. Such a reading allows us a richer understanding of the tensions at play between viewers and the categories of still and moving image.

By the time the Alice books were published, the photograph had become the predominant and ubiquitous means of preserving reality. A great deal of scholarship on nineteenth-century visual and image culture emphasizes the Victorians' shifting relationship with photography. The photograph allowed Victorians to engage with the world around them, but it also allowed them the opportunity to place and preserve themselves within that world. Certainly, as Elizabeth Heyert points out, "[t]he camera was often used as a diversion or out of a desire for recording one's life," thus making portrait photography extremely popular with amateurs and professionals alike (142). The photograph could (and still can) both capture and misrepresent realities, however, and the Victorians seem to have maintained a somewhat uneasy relationship with a technology that nevertheless proved wildly popular and came to permeate their lives. Lindsay Smith claims "the invention of the camera and the public announcement of the photographic

process of daguerreotypy in Paris in 1839 signalled an unprecedented disturbance in a range of cultural investments in the visual" (3). That a man-made device could replicate small-scale versions of reality and reproduce genuine "copies" of people and things was initially disconcerting for the Victorian mind. Nancy Armstrong notes that, in a wider cultural context, the popularization of photographic processes had unsettling effects, as Britain was on "the defense against a popular culture empowered not only by print but also by photography and all the technologies of spectacle that bombarded the national readership" ("Postscript" 311). Significantly, national anxieties over visual culture included the photographic, still image, as well as those "real" animated pictures created by optical toys, which were gaining popularity alongside photography. Mid-nineteenthcentury Victorian "society was characterised not just by the accelerated expansion of diverse opportunities for differing sorts of spectatorship," but also by concerns related to the act of looking, as Kate Flint suggests (2). Alice experiences this concern repeatedly in the books, reflecting national anxieties, even as the books themselves encourage the normalization of changing modes of visuality.

Animating Alice

Both books offer interactive potential for readers to become viewers, but a shifting interest from the photographic to the proto-cinematic or animated is evident across the two books. *Alice's Adventures in Wonderland* reflects the Victorians' more firmly rooted interest in the still, photographic image—an interest in stopping motion—while *Through the Looking-Glass and What Alice Found There* reveals the shifting modes of seeing that included growing interest in and familiarity with the moving image. Even the respective titles of the books are telling in this regard. On the one hand, the

implication of stillness and spatial fixity that marks *Alice's Adventures* is embedded within the preposition "in" and, on the other hand, a sense of movement and spatial instability is prepositionally suggested by *Through the Looking-Glass*. The photographic narrative of *Alice's Adventures* gives way to a far more proto-cinematic narrative in *Through the Looking-Glass*, which is marked by movement.

Indeed, Dodgson's first book is quite preoccupied with governing and arresting motion, thereby reflecting both his interest in photography and his desire to fix the real Alice Liddell in time and space. Perhaps the most controlling and (literally) arresting figure is the Queen of Hearts, whose constant iterations of "off with his [or her] head!" threaten the members of her court with the surest way to stop bodily motion for good and all. Much of the book, however, focuses on the ways in which Alice's motion is impeded—or more accurately, fixed. While Alice's Adventures is rife with suggestions of motion, like Alice's long fall down the rabbit hole and the caucus race, the narrative resists developing these moments with language that encourages readers to imagine animation. Instead, we are prompted to imagine Alice in stasis. During the fall, for instance, Alice "had plenty of time as she went down to look around her, and to wonder what was going to happen next," and the four pages of text that describes her looking and thinking reiterate the slow-(or no-)motion quality of this event (Wonderland 3). Readers, too, in working through these pages, enact the same slow progress that Alice makes until "suddenly, thump! thump! down she came upon a heap of sticks and dry leaves, and the fall was over" (Wonderland 6). Once in Wonderland, Alice's attempts to follow the White Rabbit are repeatedly hindered by some new obstacle, her motion is halted, particularly in the hall of (locked) doors. At this point, Alice discovers strange potions

and cakes that will alter her size, and her body begins to undergo alarming vertical fluctuations, changes that she attempts to control in order to facilitate her entrance into "the loveliest garden you ever saw" (8). Again, while the size changes Alice experiences seem to imply motion, the narrative conveys these in terms that do more to suggest an immediate shift from one state to another, thus serving as an impediment to imagining the movement. When Alice shrinks, for instance she says "I must be shutting up like a telescope.' And so it was indeed: she was now only ten inches high" (*Wonderland* 11).

The suggestions of motion throughout the book, whether related to Alice's geographical or physical changes, are best read in terms of photographic composition and the chemicals needed to develop and resize photographs. Significantly, as Monteiro suggests, the door through which she first views the garden is very like the back of a photographic "apparatus, with a curtain to cover the photographer's head and the sliding plate holder that blocks the camera's viewfinder" (106-107). Meier, too, acknowledges the door's resemblance to a camera, in both design and size. He further remarks that "Alice's Wonderland existence in the room with the little door may thus be read as living in a photographic box, or more abstractly speaking, in photographic space" (120). It comes as no surprise that Alice, immersed in the photographic space of Wonderland, is anxious to learn to control the effects of the food and drink she encounters there: she is, in a sense, an amateur photographer who must sort out the tools of her trade by trial and error. Simultaneously, however, she seems to be the subject of her own photographic process, as the sizing effects with which she plays allow her to enter and become fixed in new Wonderland spaces:

"How puzzling all these changes are! I'm never sure what I'm going to be, from one minute to another! However, I've got back to my right size: the next thing is, to get into that beautiful garden – how *is* that to be done, I wonder?" As she said this, she came suddenly upon an open place, with a little house in it about four feet high. "Whoever lives there," thought Alice, "it'll never do to come upon them *this* size: why, I should frighten them out of their wits!" So she began nibbling at the right-hand bit [of mushroom] again, and did not venture to go near the house till she had brought herself down to nine inches high. (74-75, original emphasis)

Employing what may presumably be the chemical effects of the mushroom, Alice shrinks herself down from her "right size" to "nine inches" in order to enter the Duchess' "little house" without frightening its inhabitants with her monstrous proportions. Essentially, Alice produces a small, photographic version of herself, one that will fit properly into the next photographic space, scene, or frame of the episodic narrative. Thus, each of Alice's adventures may be read as a carefully composed photographic shot into which she inserts—or extracts—herself, based on her size. Conversing both with herself and with the denizens of Wonderland, Alice works her way from one pictorial frame to another, in a sequence that quite resembles a photographic album of individual (and often unrelated) still images. In Wonderland, Alice becomes a composite element of precisely what she feels is lacking in her sister's boring book: pictures and conversations. What is more,

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⁷ Nineteenth-century photography was messy and difficult due to the number of chemicals required to perform the wet collodion process. According to Roger Taylor and Edward Wakeling, "photographers fought a never-ending battle with their chemical baths as they attempted to achieve consistent results. Dodgson bought his chemicals from reputable manufacturers whose products were more likely to be pure and reliable" (27).

Alice has a hand in developing both of these, which is, of course, messy and troubling at times. The adventures Alice experiences are individually rather static, but readers bring these photographic episodes to animated life during the process of working through the text. The production of motion is generated by the reader, as it is with an optical toy.

In Looking-Glass Land, it seems Alice has no need to trouble about her own size and whether she will fit a particular frame; rather, she is troubled by the backwards nature of the mirror world. Published six years after *Alice's Adventures*, *Through the Looking-Glass* takes Alice into a dreamscape that is less photographic and even more protocinematic—animated—than Wonderland. If one of Alice's concerns in Wonderland is finding and maintaining the "right size", which alters depending on the photographic space she would like to join, her concern in Looking-Glass Land is finding the right place, which necessitates movement. To be sure, the landscape of Looking-Glass Land is "marked out just like a large chess-board", as Alice discovers during her conversation with the Red Queen (*Through* 38). The game of chess is, after all, about making the right moves, and Alice must move through Looking-Glass Land and gain the eighth square in order to become a Queen, as she wishes. During Alice's meeting with the Red Queen, a peculiar form of movement occurs:

Alice never could quite make out, in thinking it over afterwards, how it was that they began: all she remembers is, that they were running hand in hand, and the Queen went so fast that it was all she could do to keep up with her: and still the Queen kept crying "Faster! Faster!" but Alice felt she *could not* go faster, though she had no breath left to say so. The most curious part of the thing was, that the trees and other things round them

never changed their places at all: however fast they went, they never seemed to pass anything. "I wonder if all the things move along with us?" thought poor puzzled Alice. (39-40, original emphasis)

Here, the Red Queen and Alice are actively engaged in motion; they are running, and Alice clearly experiences the effects of the effort, as she is out of breath and physically incapable of going any faster. However, the scene remains the same, appearing to Alice as though it moves "along with" them. Puzzled by this, Alice becomes even more disconcerted when she discovers that she and the Queen have, in fact, been running for quite some time and have not moved at all. As the Queen says, "here you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" (42, original emphasis). In Looking-Glass Land, where everything is backwards, one must run to stand still; motion preserves a static, photographic space. Embedded within this notion of simultaneously running and staying, however, is the very practice of viewing animated pictures. Alice experiences what seems, to her, the illusion of movement from a fixed position, very like a stationary viewer observing the movement produced by a phenakistiscope or zoetrope. In a fashion, then, she exemplifies the reader. As in Dodgson's first book, however, Alice is also the subject here: she is the motion picture that we produce around which nothing else moves.

It is not always so in Looking-Glass Land, however, as Alice eventually does succeed in moving to somewhere else. Indeed, she often arrives at a new square via some form of transportation or another, a pattern that calls to mind the animated pictures viewed through the slots of a phenakistoscope or zoetrope. She takes the train, for instance (yet another version of statuary motion, one that arguably prepared the

Victorians for motion pictures), through the third square and eventually finds Tweedledum and Tweedledee, who "stood so still that she quite forgot they were alive" (66). In Looking-Glass Land, Alice is often taken by surprise at the sudden movement of creatures who seem fixed, as in a photograph. Expecting wax-works and stuffed figures that are incapable of motion, Alice is constantly reminded that Looking-Glass Land is not a world of stasis; rather, it is designed to be moved through, and she and its creatures are meant to move through it. The final Looking-Glass scene culminates in a spectacular display of motion. Alice, finally a Queen and tired of the nonsense, disrupts the dinner party, which has become altogether confused and tumultuous: "I can't stand this any longer!' she cried as she jumped up and seized the table-cloth with both hands: one good pull, and plates, dishes, guests, and candles came crashing down together in a heap on the floor" (212-213). Alice, anxious and feeling the need to take action in order to put an end to the excess of insanity going on around her, makes a violent motion that brings everything "crashing down." Indeed, she follows this action with another equally violent maneuver, as she shakes the Red Queen into a kitten: "- and it really was a kitten, after all" (216, original emphasis). Thus waking herself, Alice discovers that Looking-Glass Land, like Wonderland, had been a dream-world. However, we are left with the sense that inanimate objects—still lifes—like the chessmen, become animated with motion and life once they pass through the framed mirror over the mantelpiece. When "the glass has

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⁸ Although my methodology does not rely on psychoanalytic theory, it is important to note that, from a psychoanalytic perspective, dreams are often perceived as cinematic. See, for example, Lydia Marinelli's fascinating article "Screening Wish Theories: Dream Psychologies and Early Cinema."

got all soft like gauze, so that we can get through" (10), we enter the celluloid world of animated pictures where fantastical beings and scenes temporarily do become real.

Animating Readers

Dodgson's texts narratively reflect the development of visual technologies, but they also materially participated in that development. Mou-Lan Wong has asserted that Dodgson took great pains with the physical layout of his books, and she demonstrates the ways in which Dodgson's text and Tenniel's illustrations "are carefully coordinated to match each other" (139). Arguing that the placement of text and image invites readers to actively engage with the stories, Wong points to several occasions in each of the Alice books (as they were originally printed) that exemplify the necessity of the reader's hands. She notes, for instance, Tenniel's depictions of the vanishing Cheshire Cat, which "are both placed on the recto side of overlapping leaves. . . . The reader is able to flip the pages back and forth and enjoy the optical illusion of making the Cat disappear and reappear" (145). Similarly, Wong remarks upon the two images of Alice at the Looking-Glass, "which are placed on two sides of the same leaf":

Alice's movement is visually reinforced along with the narrative in three ways: first, in the layout of the text; second, in the placement of the illustration; and third, in the corporeal structure of the book itself. The coordinated precision of narrative, text, and illustration opens a new

⁹ Unfortunately, most contemporary editions of the Alice books make no efforts to preserve the original layout. One exception is the Engage Books facsimile edition, cited herein.

¹⁰ Monteiro and Meier each comment on the photographic quality of Tenniel's illustrations of the Cheshire Cat, whose vanishing and reappearing body calls to mind the chemical development of photographic images (Monteiro 102; Meier 131, n. 33). Leora Wood Wells describes the scene in terms of the magic lantern and the effects of dissolving views.

dimension in the actual structure of the book, a personal dimension that relies on the reader's action. . . . [B]y incorporating the mechanics of a book through its uncanny placing of the two illustrations, Carroll generates a visual phenomenon that necessitates a physical action or reaction from the reader. (144)

The first editions of the Alice books not only encouraged readers to figuratively follow Alice into Wonderland and Looking-Glass Land, but they also required readers to physically move themselves into the dream worlds with her by turning the pages. The entrance into Looking-Glass Land is, literally, a case of moving pictures (Figure 15).

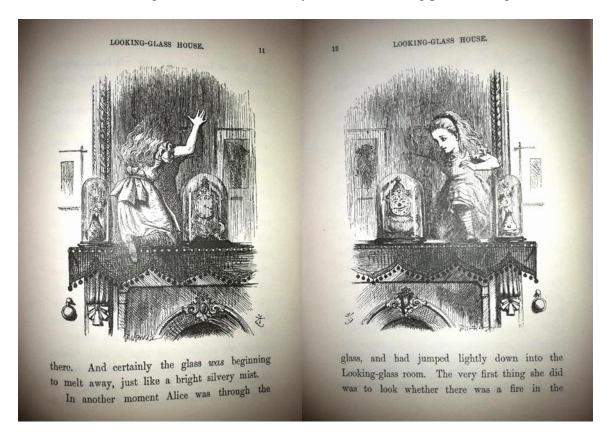


Figure 15. Entering Looking-Glass Land.

Dodgson's careful coordination is evident here, as the words "Alice was through the" demand readers turn the page to complete the animated narrative and visual effect of crossing the mirror's threshold. Images captured by author of pages 11-12 of Engage Books facsimile edition.

The layout of text and illustrations, as Wong rightly contends, creates the potential for optical illusions and visual phenomena that are then activated by readers' hands. I would like to take the participatory nature of the books a step further and suggest that, in the hands of adult and child readers alike, they were akin to the optical toys that were so popular in nineteenth-century households. Some scholarly inroads have been made regarding the way texts appropriate or integrate visual media. John Plunkett, for example, has suggested that "a significant number of illustrated and movable books, usually aimed at a juvenile audience, . . . exploited the novelty of the latest optical recreations. These children's publications attempted to replicate – or structure themselves on – the viewing experience of peepshows, panoramas and the magic lantern" (1). While Plunkett does not explicitly discuss the Alice books, it is clear that they, too, demonstrate this relationship with optical toys.

The Alice books in the nursery may have produced a similar effect to that of the zoetrope in the parlour, instilling in the Victorians a desire to see illustrated images or photographic versions of themselves come to life with movement. Indeed, Wong points out that *The Nursery Alice* (1890) reveals Dodgosn's acknowledgement that the book may be played with as though it were an optical toy. The Cheshire Cat episode, consisting of "the same design and layout" as in *Alice's Adventures*, includes Dodgson's directions "to attempt a different kind of optical trick: 'If you turn up the corner of this leaf, you'll have Alice looking at the Grin: and she doesn't look a bit more frightened than when she was looking at the Cat, *does she*?"" (qtd. in Wong 145, original

emphasis). 11 Dodgson encourages his young readers—the generation that would grow up to feel quite at home in the cinema—to both produce and observe a form of motion picture, just as they would in actively spinning a phenakistoscope or zoetrope. The Alice books' narrative and material participation in the development of cinema may also be evidenced by Reynaud's praxinoscope (again, introduced in 1877). The apparatus hybridized the earlier phenakistoscope and zoetrope, bringing back the use of mirrors to improve the illusion of movement. As with Dodgson's Looking-Glass Land, backwards reflection creates forward motion.

The Alice books narratively and materially embody a pattern of technological change, a change that relies, particularly, on the mixing of media and the hybridization of proto-cinematic devices. It has certainly not been my intention herein to obfuscate the complex picture that Alice presents, nor to suggest that her creator possessed some prophetic ability to "remember things before they happen" (*Through* 95). Indeed, the Alice books raise many issues that warrant examination, and Dodgson was a man who, likely, had no more clairvoyance than his contemporaries. He was, however, an avid photographer, a clever storyteller, an enthusiastic theatregoer, and a keen logician. Perhaps significantly, he was also a collector of all sorts of toys, including puzzles, games, and other ephemeral items, which suggests a familiarity with optical toys and the

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¹¹ In his preface to the 1896 edition of *Through the Looking-Glass*, Dodgson implies that his *Nursery Alice* is something special compared to "ordinary shilling picture-books" and laments that "the Public have practically said, 'We will *not* give more than a shilling for a picture-book, however artistically got-up." He concedes, however, to take a financial loss "rather than let the little ones, for whom it was written, go without it." Selling *The Nursery Alice* for a shilling may have affected Dodgson's profits, but the price reduction from four shillings to one very likely allowed many more children access to Wonderland. See 147-48 in the Barnes and Noble edition.

interactive playthings that would appeal to his readers. 12 These attributes may well have lent him the foresight to perceive the logical progression of nineteenth-century visual technologies and to capture an emerging continuum of cinematic process in his writing. This is not to say that Dodgson was particularly desirous of seeing society follow such a progression through. In fact, if the Alice books reveal anything about Dodgson himself, they suggest that he felt the dreamlike world of motion pictures would be both an exciting and a foreign place, in which the act of looking is often inextricably linked to anxiety. The Alice books contain the oft-repeated phrase "looking anxiously" or some variation of it, and this visual tension permeates both the photographic space of Wonderland and the cinematic space of Looking-Glass Land. It seems that, for Dodgson and for many other Victorians, changes of all sorts—those affecting the individual body, as well as those affecting the body politic of Britain as a whole—were simultaneously desired and feared. This perception of change is, of course, not so very different from ours, particularly as we drive enthusiastically towards technological changes and, at the same time, nervously question what those changes might mean for our world.

Reanimating Alice

As the lines of the epigraph suggest, Alice, like cinema, embodies the union of motion, vision, and dreams. Famously known as the Dream Factory, Hollywood has, of course, produced many motion picture adaptations of Dodgson's books. Alice's latest cinematic appearances exemplify a particularly remarkable convergence between adaptation, technology, and popularity. Tim Burton's film, for instance, brings Alice back—to us and to Wonderland—as a nineteen-year-old woman who must rediscover the

¹² See Morton N. Cohen's Lewis Carroll: A Biography.

imagination and independence, the "muchness" that marked her childhood. 13 Endeavouring to escape an uncomfortable marriage proposal, Alice Kingsleigh (Mia Wasikowska) accidentally finds her way into Wonderland, or "Underland" as it is now called, in much the same way that Dodgson's Alice does: by following the White Rabbit down his hole. Once there, however, Alice experiences different adventures and meets a number of new Wonderland creatures, including the Bandersnatch. Indeed, the "Jabberwocky" poem from Dodgson's second Alice book provides the source material for many of the details, characters, and plot points of Burton's film. Alice's journey, for instance, ultimately culminates in her battle against the Jabberwock, after which she returns to the "real" nineteenth-century world and, guided by her newfound desires and independence, declines the marriage proposal and chooses her own future path in life. An admixture of live-action, motion capture, and computer-generated imagery (CGI), Burton's adaptation of *Alice* uses cutting-edge, hybridized animation techniques, as well as stereoscopic 3-D technology. The film was shown on IMAX screens and in traditional theatres to tremendous international response. During its theatrical run, the film grossed over one billion dollars worldwide, an impressive feat that had then been achieved by only five other films (Bettinger). 14 Employing innovations in both narrative and filmmaking, Burton's revision, as well as Bobin's follow-up, which also heavily

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¹³ During the Mad Tea Party in the first *Alice* book, the Dormouse tells Alice about the three sisters of the treacle-well, who learned to draw everything "that begins with an M, such as mousetraps, and the moon, and memory, and muchness" (109). This notion of "muchness" returns in Burton's film as an attribute that the Hatter (Johnny Depp) claims Alice has lost.

¹⁴ The five other films are *Avatar*, *Titanic*, *Lord of the Rings: The Return of the King*, *Pirates of the Caribbean: Dean Man's Chest*, and *The Dark Knight* (Bettinger). As of June 2016, 26 films have joined what entertainment writers call the Billion Dollar Movie Club.

reimagines the narrative and uses ample animation technology, constitute the current epitome of the ways in which Alice has always been inextricably linked to change and to technology.¹⁵

Burton's *Alice* anticipates the future and, in large part, does so by reflecting upon and re-envisioning the past. In narrative and technological terms, the film re-imagines the nineteenth century by hybridizing Dodgson's original stories and by looking beyond the point at which those stories end. Burton imagines what might have happened to Alice in later life as a result of her visits to Wonderland and Looking-Glass Land and, to some degree, the film portrays an Alice infused with twenty-first-century ideology, making Burton guilty of "the resuscitating of history in an image of the present—and of the present's own image systems" (Stewart 195). To be sure, Burton's *Alice* privileges contemporary ideals of female autonomy and modes of mass spectatorship, but it also interrogates the ways in which nineteenth-century notions of memory, imagination, and progress bleed into the present and help shape futurity. Also present in Burton's adaptation, or perhaps, more aptly, "sequel," is an insistence on acknowledging the longevity of creative vision. At the heart of Burton's Wonderland lies the assertion that the special effects inherent to the products of such vision are their ability to endure, evolve, and empower. Even as he pays homage to Dodgson, Burton celebrates—and, of course, participates in—the growth and change that Alice has undergone independently of her creator.

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¹⁵ Bobin's *Alice through the Looking-Glass* was not nearly as well-received as Burton's film, possibly because the sequel came out six years after the first film. While this time frame replicates the publication history of Dodgson's books, movie-going audiences might have felt the sequel was unnecessary, particularly since it takes even more of a narrative departure than the first.

Dodgson finds his way into Burton's film, significantly, as Alice's father Charles Kingsleigh (Marton Csokas). 16 Although we meet this character only briefly in the opening sequence, during which he soothes seven-year-old Alice's fears of going mad after her first foray into Wonderland, his formative influence on Alice continues after his death. For instance, nineteen-year-old Alice counters her dull suitor's insistence on the futility of imaginative thinking with the claim that "my father said he sometimes believed as many as six impossible things before breakfast." Later, as she steels herself for battle with the Jabberwock, Alice revises this statement by asserting, "sometimes I believe as many as six impossible things before breakfast." Thus quoting from *Through the* Looking-Glass, Burton's Alice reveals a reliance upon her father/creator, but she also begins to assert her own authority over the text, making the words her own. Similarly, Alice tells the caterpillar (voiced by Alan Rickman) that her father "had a vision that stretched halfway around the world," a vision which she appropriates in the end when she returns to surface society aboveground, becomes an apprentice with a merchant company, and makes ready to sail for China. Although Alice has the capacity to imagine prior to revisiting Wonderland, it is here that she learns to firmly believe in and take action toward her desired realities. Her turning point occurs during her conversation with the caterpillar, as he helps her to remember her first visit. We see episodic flashbacks of young Alice painting the roses red, having a mad tea party, and engaging in other activities from Dodgson's first book. Afterward, Alice exclaims that "it wasn't a dream at

¹⁶ The name also pays homage to Dodgson's contemporary, Charles Kingsley, who wrote a number of historical novels and children's books. *The Water Babies: A Fairy Tale for a Land Baby* (1863) shares some qualities with *Wonderland*, in that its protagonist, Tom, falls into a river and experiences odd transformations and fantastic adventures.

all; it was a memory. This place is real, and so are you, and so is the Hatter." Choosing to believe in the reality of Wonderland, Alice then accepts her role as the foretold champion who will defeat the Red Queen's Jabberwock.

Indeed, the crux of Burton's *Alice* is the backwards or inverted use of Dodgson's "Jabberwocky" poem. Even as its title invokes the first *Alice* book (1865), Burton's film transplants the 1871 Looking-Glass poem into Wonderland as a prophecy indicating that the "Frabjous Day" will come when Alice defeats the Jabberwock. In one sense, the poem becomes a part of an earlier time and place and, certainly, Burton's sequel is, in large part, simultaneously concerned with remembering the past and looking to the future. Burton's twenty-first-century Alice is twelve years older than Dodgson's—a futuristic version in both her age and year of production—has already visited both Wonderland and Looking-Glass Land, and has, presumably, already encountered the poem in its original (past tense) form. The poem, then, undergoes not only a spatial inversion, in that the land in which it exists is switched, but it also becomes temporally inverted, in that it no longer mirrors the past but, rather, the future. As Alice journeys toward her inevitable confirmation of the prophetic version of "Jabberwocky," she regains the imaginative strength and muchness that she possessed in her past as a (Carrollian) child. In this, too, we find Burton's Alice authorizing herself against the original narratives.

Burton's Alice also authorizes herself against nineteenth-century gender roles. In *Through the Looking-Glass*, shortly after she passes through the mirror, Alice discovers a book and learns to read the backwards text of "Jabberwocky" which details the exploits of the "beamish boy" who slays the creature (*Through* 24). Early in Burton's film, Alice

has "a sudden vision of all the ladies in trousers and the men wearing dresses" and later defies the gendered text and removes the Jabberwock's head. John Tenniel's original illustration of this scene is significant for the film, in that its depiction of the figure wielding the Vorpal sword seems to provide visual cues that legitimate reading the "boy" as Alice. The length and texture of the hair and the slight swelling in the bust, for instance, may well have motivated this narrative choice. The image is also important in the film, as it appears on the Oraculum, the prophetic "calendrical compendium" that reveals the past, present, and future of Wonderland. Here, a slightly modified version of Tenniel's illustration is subtly animated; its lines waver ever so slightly as the Jabberwock descends upon the sword-wielding figure, imbuing it with a kind of perpetual life very like the enduring quality of the Alice books themselves with their protocinematic narrative strategies.

Certainly, it might be argued that every film adaptation relies upon the animated qualities already present in the original texts. Burton's film, however, enacts the symbolic representation of technological change apparent in the books as it moves from the traditional cinematography used to depict the opening scene of a rigid, austere, almost stagnant, nineteenth-century garden party to the sophisticated, hybridized techniques employed in the creation of a dynamic, vibrant, and three-dimensional Wonderland, into which the viewer feels plunged along with Alice. Additionally, Burton's *Alice*, like Dodgson's Alices, encapsulates an anticipatory movement toward forthcoming technologies. From the flat, two-dimensionality of the playing cards in Dodgson's *Wonderland*, for example, we shift to the round, three-dimensionality of the chess pieces of *Looking-Glass*. We should not be surprised, then, to encounter in the coming years a

technology that allows us to become virtually immersed with Alice, or perhaps as Alice, and to interact with Wonderland and Looking-Glass Land on a complex multi-sensory level, performing in the story as actors rather than merely as distanced, if engaged and enthralled, viewers (the video games do something like this already, it might be argued). 17 Like Dodgson, Burton is both anticipating and participating in the cultural development of new visual technologies. Indeed, we are already enacting a desire for such things. The recent spate of hybridized, stereoscopic 3-D films in movie theatres attests to an increasing societal demand for immersive visual experiences that are characterized by spectacular moments during which viewers and cinematic narratives, so to speak, become one. That is, the boundaries between spectator and spectacle are becoming ever more permeable, blurring the lines between observation and imagination. It is worth noting here, however, that the effects of depth and three-dimensionality afforded by stereoscopy are firmly rooted in photographic developments that occurred during the mid-nineteenth century, as previously discussed. Our ways of seeing, inherited from the Victorians, have been modified by the integration of depth, digitization, and motion, and the manner in which we see may well be in the process of changing drastically, for good or ill. Enmeshed in the social fabric that spawns such change, some individuals, like Dodgson and Burton, possess an imaginative vision that can look ahead and make gestures toward the possibilities of the future. In the case of Burton's hybridized *Alice*, both narratively and technologically, the "effect of living backwards,"

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¹⁷ The recent Pokémon Go phenomenon also seems suggestive of this cultural desire for immersion in a visual experience, one that is also reliant on movement. The basic premise of the game requires players to move through the real world in order to capture creatures that are layered or superimposed onto it by the gaming application.

as the original White Queen giddily explains, is "that one's memory works both ways" (*Through* 95).

CHAPTER V - "HIS EYES SEEMED TO BE LOOKING FAR INTO THE FUTURE":

ARTHUR CONAN DOYLE'S SHERLOCK HOLMES STORIES AND

THE FUTURE OF THE MOVING IMAGE

Like a supporting infrastructure that is never seen yet holds the entire edifice in place, faith in the eye as an error-free, non-interfering conduit of sensations is built into the foundation of every scene in which the detective puts to good use his or her exceptional powers of observation.

Yet these are not just scenes of seeing but *reading* as well, or rather seeing *as* reading.

The visible world is a text, the detective its astute observer and expert reader. —Srdjan Smajić (2010)¹

Detection and the Moving Image

Like the authors and texts discussed in previous chapters, Sir Arthur Conan Doyle and his Sherlock Holmes stories participated in an ongoing nineteenth-century fascination with new forms of visual machinery and image distribution and, in so doing, anticipated the effects of the moving image and the experiences of cinema-going and television-watching. Holmes, like Lewis Carroll's Alice, embodies visuality and reflects technological potential, making him an ideal figure for adaptation and lending him recognizability despite a range of morphed or pastiched appearances. Unlike Alice, however, whose appearances in popular culture frequently occur in the context of seeking for identity and/or understanding epistemological questions, a Holmesian presence or influence often materializes in depictions of scientifically rational and keenly observant

¹ Srdjan Smajić, *Ghost-Seers, Detectives, and Spiritualists: Theories of Vision in Victorian Literature and Science* (Cambridge: Cambridge UP, 2010) 71. For this epigraph, I have taken the liberty of arranging Smajić's prose into verse-like lines, which both emphasizes the poetic quality of the words themselves and reinforces the connection made between seeing and/*as* reading. The visual alteration of the text highlights the potential for reading as seeing, which is one of the things this chapter aims to address.

figures poised as the investigators of mystery and criminal activity. Although Sherlock Holmes is certainly not the only notable detective in fiction, his popularity and longevity speak to the ways in which multiple generations of readers and viewers have marveled at, and perhaps sought to emulate, his ability to make meaning from disparate visual clues and to construct coherent narratives from seemingly unrelated details. As T.S. Eliot remarked in 1929, "I cannot think of anything with which to compare Sherlock Holmes. He does not seem to be descended from either Sergeant Cuff or Monsieur Dupin. His relationship to Lucoq is quite superficial. He has had, on the other hand, a numerous progeny" (17). There is no character quite like Holmes, though many have since attempted to approximate his science of deduction. In "The Adventure of the Copper Beeches" (1892), Holmes's opines that "the public, the great unobservant public" is practically incapable of applying his methods in any productive way, but I suggest that Conan Doyle's stories did, in fact, encourage readers to see the world differently and to acquire a visual literacy that contributed to the development of narrative film and cinematographic practices (493). Both Holmes and Watson are integral to this protocinematic diffusion, in that Holmes's characterization and Watson's narrative strategies combine to offer readers a methodology for piecing together individual, still images into moving reenactments of crimes in progress.

Conan Doyle's Holmes—again, like Alice—has enjoyed a long history of popularity, both textually and visually. The seminal, novel-length illustrated narrative *A Study in Scarlet* was initially published by Ward, Lock and Company in the November 1887 *Beeton's Christmas Annual*. Following this textual debut, the first major stage adaptation was produced by William Gillette at the Star Theatre in Buffalo, New York, in

November of 1899, and the earliest, 30-second motion picture adaptation *Sherlock* Holmes Baffled was originally produced by Arthur W. Marvin in 1900 for the American Mutoscope and Biograph Company. Holmes has captivated the minds of readers and viewers alike in both Britain and the United States.² His iconic cultural presence has been affirmed, preserved, expanded, and circulated most notably, perhaps, by screen appearances in numerous film and television adaptations of Conan Doyle's stories. In May of 2012, the *Mail Online* noted that "Holmes has broken the record for having more film and TV portrayals than any other literary character. . . . [He] has been depicted on the big and small screen a total of 254 times," beating out runner-up, Hamlet (Ledwith and Enoch). Most recently, of course, Guy Ritchie's Sherlock Holmes (2009) film and its follow up, Sherlock Holmes: A Game of Shadows (2011), starring Robert Downey Jr. as Holmes and Jude Law as Dr. Watson, give the characters and stories something of an Indiana Jones meets steampunk twist, highlighting Conan Doyle's frequent titular inclusion of "adventure" and drawing on the steam and brass aesthetic that is increasingly common in visual representations of the Victorian period. At the present moment, television adaptations are garnering impressive cult followings and reflect the peculiarly transatlantic quality of Holmes's earliest manifestations. The BBC's Sherlock (2010-) and the CBS series *Elementary* (2012-) have rocked audiences on both sides of the pond

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² The 1887 publication of *Scarlet* featured four illustrations by D.H. Friston; a second imprint in 1888 included six drawings by Conan Doyle's father, Charles (see "A Study" in *The Conan Doyle Encyclopedia*). Gillette's play "was a rousing success" in Buffalo and opened in London's Lyceum theatre in September of 1901 (Nollen 23, 27). *Sherlock Holmes Baffled* is the earliest known extant motion picture featuring the detective. The title alone indicates who the character, clad in a dressing gown and smoking a cigar, is supposed to be, as the film is silent and without captions. Michael Pointer has suggested that the costume is based on Gillette's stage production.

with their modernized depictions of the detective and his companion. The Benedict Cumberbatch-Martin Freeman pairing in the former and the Jonny Lee Miller-Lucy Liu coupling in the latter have generated a great deal of discussion (both positive and negative) in the popular press, in online forums, and in academic venues.³ A large portion of recent Holmes scholarship has, in fact, focused on such re-imaginings of Conan Doyle's characters and cases.⁴ The dynamic duo and their progeny seem currently to belong to the visual media, particularly television, and I argue in this chapter that an affinity with visuality and changing visual technologies is rooted in the original texts.

Reimagining Victorian Crime Investigation

We consistently see evidence of an education in visual literacy in the Holmesian progeny about which Eliot writes, and in framing my argument and approach to reading the Holmes stories, I look briefly at a notable recent example that points to Holmes's pervasive legacy in television, a medium that is—has always already been—well suited to portraying the serialized, episodic cases that Holmes solves and Watson documents. In late December of 2012, the BBC aired its premiere of a series called *Ripper Street*, a Victorian-inspired crime procedural set in London's East End in 1889, just months after Jack the Ripper's last murder. "I Need Light," as the pilot episode is titled, is remarkable for the way it represents and models the detectives' art of observing and reading the visible. The show, itself a visible text that viewers read in interpretive ways, opens with a

³ See, for instance, articles by Denham, Valentine, Whyte, and Starr and Stewart.

⁴ See, for example, the essays in Porter's and Vanacker and Wynne's collections, several of which discuss recent adaptations in/for other media, such as graphic novels, video games, and the Internet.

group of middle-class late-Victorian tourists being led around the dank streets of 1889 Whitechapel by a snarky tour guide (Gary Mountaine) who points out locations where the Ripper's mutilated victims had been discovered. Thus merging a legendary (and unsolved) late-Victorian criminal reality with a popular contemporary sightseeing option and neo-Victorian narrative pastiche, the series immediately acknowledges our continued fascination with and visual consumption of the period, particularly its more grotesque features and figures. As we watch the characters viewing places where disturbing murders occurred, we are encouraged to recognize our own continued fascination with the Victorians as well as the modes of seeing we have inherited from them.⁵

Visual technologies occupy a prominent role in the episode, as well, further emphasizing Victorian modes of seeing. After the tour guide and his flock stumble upon the body of a murdered woman who appears to have been "ripped," the episode engages even more explicitly with nineteenth-century visuality and historicity, weaving together the processes of criminal investigation and photography in a unique take on the detective/cop show/police procedural genre. Viewers are introduced to a homicide team trio, a mash-up of Holmesian and Watsonian characteristics, consisting of cool and collected Detective Inspector Edmund Reid (Matthew Macfadyen) of H Division, rough-

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⁵ Ripper tours have been popular since the early 1980s and a range of companies advertise such tours online. One is particularly notable for its trademarked "Ripper Vision" concept: "a new approach to Jack the Ripper tours. Top of the range hand held projectors which emblazen 5ft images apon [sic] the dark streets and alleyways of Whitechapel. As we walk the very route the Ripper would have taken Ripper vision will practically bring you back to a time of gaslight and fog, a time of poverty, disease and silent footsteps in the shadows as the Ripper hunted his victims. RIPPER-VISIONTM brings not only top class images but also film clips, moving images and overlapping pictures to leave you with an everlasting memorable experience" (see "Ripper Vision"). This particular tour, then, fully embraces the technological opportunities for viewing the late-Victorian period.

and-tumble Detective Sergeant Bennet Drake (Jerome Flynn), and former U.S. Army surgeon and Pinkerton, Captain Homer Jackson (Adam Rothenberg). Over the course of the episode, the three enter the seedy world of prostitution and pornography, eventually identifying the murdered woman not as a Ripper victim, but as the subject of a series of risqué photographs and, ultimately, as the unfortunate "star" of what we gather is the world's first snuff film, her body mutilated and discarded to throw police off track.

The photographic process and photographic images are at the heart of this first episode of *Ripper Street* (and, indeed, they were important during the original Ripper investigation) and the notion of photographic *development* serves as a significant conceptual framework for reading the show's representation of technological progress and the latent potential for movement captured by cameras. Upon arriving at the crime scene, Reid finds a photographer, Cecil Creighton (Julian Bleach), exposing plates for use in the newspapers. For his investigative purposes, Reid requests that images be taken of the victim's body and wounds, as well as the surrounding area. Later, Reid watches as Creighton develops these evidential postmortem images, and we too catch a glimpse of a late-nineteenth-century darkroom that foreshadows a scene in which Reid, Drake, and Jackson discover a trove of pornographic photographs and several strips of film secreted away there, after which Creighton sets the room alight and traps them. Emphasizing the

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⁶ A "Pinkerton" was an agent of Pinkerton's National Detective Agency, established in 1850 by Scottish immigrant Allan Pinkerton. Initially headquartered in Chicago, the Agency helped police arrest criminals across the U.S. and was a precursor to the Secret Service. Notably, Pinkerton's was also the first American detective agency to hire a woman, Kate Warne, in 1856. The company still exists as Pinkerton Corporate Risk Management (see "About Pinkerton").

⁷ The character's first name is very likely an homage to pioneer British filmmaker Cecil M. Hepworth, who was involved in establishing the industry at the turn of the century.

violent, explosive possibilities and repercussions presented and captured by photography, Reid concocts guncotton from the processing chemicals and blasts their way out. Having lost all the visual evidence save what they stuffed into their pockets, the three men examine the remains of Creighton's horde, looking particularly at a lengthy strip punctuated by holes on either side.

This filmic strip marks a turning point in the episode, even as it might have done during the late nineteenth century. Jackson initially mistakes the exposure as a photographic sequence of images "all exactly the same," but Reid notes that the subject, a bird, is in a different position by the end, and he realizes that the sequence represents movement. Referencing an oft-ignored or under-represented historical pioneer in motion picture technology, Reid points out that "there's a man, a Frenchman, [Louis] Le Prince: an engineer. He has been experimenting with photographic images—that move." With some confusion, Jackson asks, "like a lantern show?" to which Reid replies, "no, real. It's why the pictures appear of a kind. Because every degree of muscular movement has to be captured with precision, so the end effect therefore is fluid movement. It is the precise details of our lives caught and re-presented to us." This line of thinking prompts Reid to consider the ramifications of pornographic images that could move, as the few saved from the fire feature the female victim—whose cause of death had previously been revealed by Jackson's autopsy to be a broken hyoid bone—wearing a tight leashed collar held viciously by a man already established as having a connection to the murdered woman. Reid, like Holmes, effectively reads the visual evidence, constructing a narrative of crime, and as the episode hurtles to its conclusion, the threads of his investigation converge: Creighton, indeed, has a machine that is capable of both capturing and

projecting moving pictures, and he is in the process of filming a second murder when Reid and company arrive on the scene in time to stab the killer and rescue the choking prostitute. Meanwhile, disgusted with his role in visually documenting debauchery, cruelty, and violence, Creighton opens the back of his apparatus and, once again, sets fire to the images he has produced. Seeing that it is too late to prevent the destruction of the film reel and the motion picture device, Reid, with a tone that simultaneously conveys threat and admiration, remarks, "whatever happens, whatever punishment is seen fit for all this, *that* is extraordinary." Sobbing, Creighton takes the burning box-like camera into his arms, is quickly engulfed in flames, and dies screaming along with his contribution to motion picture technology.

"I Need Light" functions as an historical fiction that detects and depicts the birth and death—and presumably the disappearance—of a motion picture apparatus that predates the more well known Lumière brothers' Cinématographe and Edison's variously named machines. Despite neglecting to acknowledge a multitude of contemporaneous individuals and devices used to produce and project motion picture effects in the 1870s and '80s (such as the phenakistoscope, zoetrope, praxinoscope, mutoscope, and other devices), thereby obfuscating the variety and complexity of the technological capabilities on the spectrum from the photographic image to the moving image, the episode does

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⁸ Louis Le Prince began experimenting with motion picture systems in the early 1880s while living in New York; he applied for and received patents in multiple countries and spent time in Leeds attempting to create improved techniques for projection by using both paper and celluloid bases. Interestingly (though unfortunately), Le Prince disappeared in September of 1890 as he prepared to travel from Dijon to Paris, a "victim of the most famous personal tragedy of the Victorian moving image world. In 2003, an 1890 photograph of a drowned man resembling Le Prince was discovered in the Paris police archives" (Herbert). Mystery and detection efforts, it seems, have long been coincidentally entrenched in the history of the motion picture.

quite admirably develop a metavisual narrative that invites consideration of what has so often been an invisible or unseen history of the motion picture.

That the television series places this history in the context of detection and a crime-solving narrative is particularly noteworthy, as there has been some scholarly interest in tying the birth of photography to the development of the detective fiction genre. Robert B. Ray, for instance, explains that urban life brought with it anxieties that were explored, exploited, and negotiated by the almost simultaneous appearance of photography and Poe's "The Murders in the Rue Morgue" (1841). As Ray suggests, "the detective story offered to make the world, and particularly the urban scene, more legible" by creating order and comprehensibility from seemingly chaotic and infinite details, thus "function[ing] as an antidote to photography," in which the details, intentional and accidental, "ensured that in every context where it [photography] intervened, distinguishing the significant from the insignificant would become treacherous" (21). Even as it was appropriated for use as a detection method and surveillance tool, the photograph "criticized all classification systems," thereby resisting efforts to gain and maintain order (Ray 20). For the untrained viewer, then, the photograph with its many static details could be as distracting as the stereoscopic views discussed by Oliver Wendell Holmes. Too many narrative possibilities could arise from or remain hidden in the minutiae. Indeed, the camera itself could become a significant though unnoticed detail, easily missed by an unsuspecting public. Lynda Nead, in describing the so-called

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⁹ Ronald R. Thomas also comments on this "remarkable correspondence between the history of the camera and the history of the literary detective in nineteenth-century England" and explores Sherlock Holmes's photographic capabilities (135).

detective cameras that came into vogue during the 1880s and '90s, points out the rather threatening panoptic implications of such devices:

Detective cameras exploited the voyeuristic pleasures of hand-camera technology – of small gadgets hidden from the public eye, enabling observation without the operator being observed. The cameras were disguised about the body of the photographer, in hats and cravats, and in the form of bodily accessories such as parcels, books and walking sticks. . . . Cameras were ubiquitous and at the same time invisible, creating an environment that was always alive to the presence of a camera. (114)

In a sense, the meandering operators of unseen detective cameras were enacting a kind of motion picture production, their montage of still images documenting the candid realities of the metropolis. Additionally, the small, hidden devices suggest a merger of man and machine; functioning more as an internal component of the body than as an external appendage of it, detective cameras were an odd little feature of the period that we might now read in terms of the post-human and how technology can seem to advance us to something beyond the human.

It is perhaps no accident that the most renowned fictional detective of all,

Sherlock Holmes, appeared along with the detective cameras and, I argue, along with

cinema. Holmes never uses a camera of any kind, but he does not have to: the character is
akin to a detective camera himself. He relies upon his powers of observation and
imagination to record and read his surroundings and to reconstruct the crime. Ray claims
that Holmes "depends upon a photographic way of seeing that, like rack focus, redirects
the gaze from foreground to background, and, like a pan, from center to margin,"

effectively capturing all details of a scene and making "[t]he Holmes stories . . . the written equivalent of photographs, where apparently incidental details, like Barthes's third meanings, persistently replace the proffered *studium*" (22). Holmes, or perhaps more accurately, the narrating Watson, consistently draws our attention to minutiae on the periphery of a scene and offers alternative readings of the perceived reality. In this way, Holmes and Watson model for us on the one hand a method of resisting the unseen surveillance of others by exercising our own powers of observation, and on the other hand a mode of reading the texts of the visual and moving world in ways that rewind and replay reality to construct narratives of crime. Just as Ripper Street's Detective Inspector Reid discovers a fascinating new category of image in the making, Holmes was simultaneously forging and following a track that brought into view possibilities for, and indeed, actualities of, motion picture technologies and distribution systems. The Holmes stories, I contend, contributed to an increasing visual literacy, which allowed late-Victorian and Edwardian audiences to experience the reading of the moving visual and, thus, to learn a cinematographic grammar that could be used by both the makers and audiences of narrative silent film.

Picturing Sherlock Holmes: Canon and Character

The Holmes canon offers a unique opportunity for investigating the intersection of literature and technological innovation, as it comprises fifty-six stories and four novels published over the course of forty years, from 1887 (with *A Study in Scarlet*, as mentioned above) to 1927 when *The Case-Book of Sherlock Holmes* brought out in one volume the final twelve adventures, which had been previously published in *The Strand* between 1921 and April of 1927. The publication period of the Holmes stories

encompassed an era of tremendous change, including the death of Queen Victoria and the ascension first of Edward VII, then of George V. In addition to the political upheaval caused by changing monarchs, the United Kingdom was involved in several wars over the course of the period, the most devastating of which was World War I. At home, transportation and communication networks spread, utilizing newly developed mechanisms and harnessing freshly understood forms of energy, such as steam, electricity, radio waves, and electromagnetic waves. Brian H. Murray emphasizes that "the speed at which news was transmitted" during the Victorian period was "spurred on by radical developments in printing (the steam powered rotary press), transportation (turnpikes, railways and steam ships) and telecommunications (the 'Penny Post' and the electric telegraph)" (115). Toward the end of the nineteenth century, particularly, the rapid transportation of bodies and the almost instantaneous transmission of information had become firmly entrenched components of life.

In terms of visual technology, the same forty-year span during which the Holmes stories were published saw the specification of photographic apparatus and the rise of various motion picture devices as well as the establishment of a commercial film industry. As a concept and a practice, "cinema begins in earnest in the 1910s with the institutionalization of motion pictures within a defined industry that included shared aesthetics and modes of production" (Dulac, Gaudreault, and Hidalgo 2). Prior to this, however, proto-cinematic photography techniques and moving image apparatus were widespread and allowed for unique new viewing experiences. For example, 1887—when *A Study in Scarlet* appeared—was also the year in which Eadweard Muybridge published his massive photographic portfolio, *Animal Locomotion*, which consisted of some 20,000

images depicting the minute stages of various creatures in motion, collected in sequences that could be studied individually to better understand kinetics and biology. These sequential images could also be viewed in rapid succession, with individual shots composed into a flipbook-like series, which allowed observers to perceive the subject in motion. Recalling the scene from *Ripper Street* described above, Muybridge's photographic efforts captured "every degree of muscular movement . . . with precision," producing the effect "of fluid movement" over which Reid marvels as he gazes on the filmstrip featuring a bird. The images used for this teleplay prop, in fact, appear to have come from Muybridge's work (Figure 16).

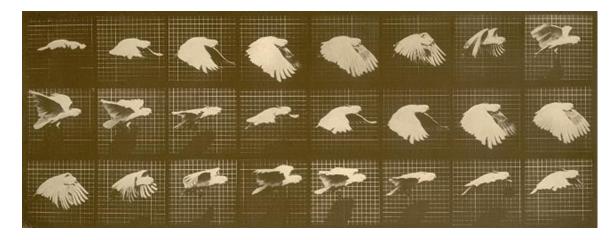


Figure 16. Muybridge photographic sequence of a cockatiel in flight.

Plate 759 of *Animal Locomotion*. Image retrieved from University of Pennsylvania, Penn Libraries University Archives Digital Image Collection. For *Ripper Street*, it appears that the top row alone of this sequence was used, turned vertically and given the appearance of film with holes on either side of the strip.

Muybridge occupies an important position in the history of photography as well as the moving image. ¹⁰ His studies of motion mark a significant departure from previous

¹⁰ In her admirably expansive treatment of the role of photography in Victorian science, Jennifer Tucker warns against focusing too heavily on "canonical photographs" and "pioneers to the exclusion of workers in ordinary science," which "risks eclipsing less-known photographic studies . . ." (9). This is certainly a danger that I have attempted to avoid throughout this

applications of photography, which had mainly attempted to document unmoving objects or subjects. Tom Gunning has suggested that "even as single images, Muybridge's photographs announced the unique ability of cinema, capturing the impression of an instant of time beyond the capacity of the human eye to retain it" ("Animated Pictures" 106). There was, in other words, the potential for movement hidden within each still image of a subject in motion, present there in an almost supernatural way, like the hovering spectre or the silent ghost of motion embedded somewhere behind or within the materiality of the photograph. Indeed, the photographic know-how provided by Muybridge's sequences paired with versions of the mechanical apparatus used to create animated pictures (as discussed in Chapter III) led to motion picture devices that predated the Lumière's. Conan Doyle was himself an avid photographer, and he contributed a number of essays to the British Journal of Photography from the early 1880s almost to his death in 1930.¹¹ These articles present a fusion of technological savvy and narrative dexterity, creating a portrait of Conan Doyle that resembles a combination of the machine-like Holmes and the storytelling documentarian Watson.

The cinema came into its own during Conan Doyle's lifetime and during the original literary lifetime of Sherlock Holmes, who has been tied to so many cultural trends. In an essay examining the politicized televisual adaptations of Holmes in the 1980s and 90s, for instance, Neil McCaw notes that "Holmes has been part of (to give

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dissertation, but I feel that precisely because Muybridge is one of those figures "emblematic of scientific discovery," he deserves space here (Tucker 9).

¹¹ Unfortunately, it seems that very few of Conan Doyle's photographs survive (Green and Gibson xiv).

just a few examples) the evolution of silent cinema, World War II propaganda, and, most recently, the information technology explosion of the twenty-first century" (36). My interest, of course, is in the first of those, upon which McCaw does not elaborate. Following *Sherlock Holmes Baffled*, a number of lengthier cinematic adaptations appeared, existing alongside the written text, thus giving the detective a kind of dual life that fully permeated American and British culture by the 1920s. ¹² Catherine Wynne suggests that "early twentieth-century screen representations, such as those of Eille Norwood and Basil Rathbone, compounded Holmes's popularity" (3). Having seen at least some of these adaptations himself by 1924 when his autobiographical *Memories and Adventures and Western Wanderings* was published, Conan Doyle commented on the former's portrayal of the detective, noting also a previous effort by French filmmakers to purchase the rights to the works:

Films of course were unknown when the stories appeared, and when these rights were finally discussed and a small sum offered for them by a French Company it seemed treasure trove and I was very glad to accept. Afterwards I had to buy them back again at exactly ten times what I had received, so the deal was a disastrous one. But now they have been done by the Stoll Company with Eille Norwood as Holmes, and it was worth all the expense to get so fine a production. Norwood has since played the part on the stage and won the approbation of the London public. He has that rare quality which can only be described as glamour, which compels you to watch an actor eagerly even when he is doing nothing. He has the

¹² Holmes was also popular on the Continent. Claudia Capancioni draws attention, for example, to the many Italian "parodies and pastiches" of Holmes (81).

brooding eye which excites expectation and he has also a quite unrivalled power of disguise. My only criticism of the films is that they introduce telephones, motor cars and other luxuries of which the Victorian Holmes never dreamed. (75)

I quote at length, since this passage seems to represent the only occasion on which Conan Doyle discussed film in general or the cinematic adaptations—and related financial arrangements—of his stories. Additionally, this excerpt is notable in that it suggests, despite a paucity of written accounts of his experiences of film, Conan Doyle felt himself to be capable of judging the quality of "so fine a production." Lauding Norwood's performance on screen and, subsequently, on stage, Conan Doyle subtly acknowledges the ways in which his own Holmes's theatricality and penchant for impersonation are integral to visual portrayals. Norwood's "brooding eye" and "power of disguise" make him not only a remarkable actor, but also a compelling Holmes. In pointing out Norwood's "rare quality," Conan Doyle also touches on the theoretical film concept of photogénie, which finds in the automatism of cinema a kind of glamorous effect by which "the camera rendered some otherwise ordinary objects, landscapes, even people luminous and spellbinding" (Ray 4). 13 Finally, and a bit oddly, Conan Doyle points to anachronism in the films. The author, perhaps, misremembers that several of his own stories, published prior to the production of the films in which Norwood starred from 1921 to 1923, include such luxuries as a "huge 100-horse-power Benz car" ("His Last

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¹³ Ray demonstrates that two competing strands of film theory developed shortly after WWI. A component of an the Impressionist-Surrealist approach to film theory, *photogénie*, fell from theoretical applications in favor of Eisenstein's "insistence that filmmaking as an art depended on repudiating the camera's automatic recording capacity" (Ray 3). The concept did not disappear, however, as Ray notes "Hollywood skillfully employed" it in a manner akin to fetishism, banking on "viewers' fascination with individual players" (5, 6). Norwood was apparently seen this way in Britain.

Bow" [1917] 492) and "a telephone projecting from the wall" of an office at Scotland Yard ("The Man with the Twisted Lip" [1891] 370). Holmes even uses state of the art audio technology to trick and catch a criminal in "The Adventure of the Mazarin Stone" (1921). Having made a jewel thief think he was in another room playing his violin, Holmes extolls "these modern gramophones" as "a remarkable invention" (573). It is, in fact, something of a surprise that no direct references to motion picture technologies appear in the Holmes stories, which are set between approximately 1874 and 1914.

Of course, as I have begun to point out, various other scientific, visual, communications, and transportation technologies crop up repeatedly in the Holmes canon, and these often play a significant, yet subtle, role in the detection of criminals and in the resolution of cases. To be sure, the Underground and the bicycle, the typewriter and the telegraph, the telescope and the photograph, even the motor car, the electric light, the telephone, and the gramophone had all become or were in the process of becoming common features of middle-class Victorian life by the time Conan Doyle introduced his inimitable characters, and Holmes's frequent interaction with and deft use of such technologies effectively confirmed his status as a modern man of the *fin de siècle*.

Regular readers of the Holmes stories learn that the detective is enmeshed in, attuned to, and defined by an industrialized society; indeed, he is himself a fixture and a feature of modernity. He navigates both urban and rural landscapes with ease, firing off wires, hopping on trains, dressing in disguises, sifting through and storing data. His intensely rational mind is capable of housing massive amounts of information, data that is carefully selected. When we first meet Conan Doyle's Holmes, he refers to his mind as a "brain-attic" holding "nothing but the tools which may help him in doing his work" (A

Study 13). 14 His extreme focus and tepid exterior contribute to his ability to rapidly make deductions, and his detached nature leads Watson to refer to him, on more than one occasion, as a machine. Watson exclaims to Holmes in *The Sign of Four*, for example, "You really are an automaton—a calculating machine. . . . There is something positively inhuman in you at times" (135; this because Holmes neglected to notice the beauty of a female client). He is "the most perfect reasoning and observing machine that the world has seen" ("A Scandal" 239), and his "red-Indian composure" makes "so many regard him as a machine rather than a man" ("Crooked Man" 646). Watson regularly comments upon Holmes's abilities making him machine-like and thus Other, foreign, something seemingly not quite human. Also like a machine, Holmes exists to do his work, is driven by it, and he functions smoothly only when there is a case to be solved. Watson routinely describes the manner in which Holmes is either on or off, wholly energetic or entirely passive; he exists in "fits of splendid energy and vigor" (Sign 234) alternating with complete inactivity marked either by sleep or a drug-induced haze. Holmes, in fact, seems to identify with machines more than he does with other people. He refers to himself as "a brain," his body being "a mere appendix" ("Mazarin Stone" 561), but when there is nothing of interest to investigate, his "mind is like a racing engine, tearing itself to pieces because it is not connected up with the work for which it was built" ("Wisteria Lodge" 326). Or it may be that people and technologies are, for Holmes, quite similar and might even be conflated. In one of the two stories Holmes narrates himself, he describes rural gossiping as a "strange wireless by which such people collect the news of the

¹⁴ In the BBC's *Sherlock* the updated, twenty-first-century Holmes refers to his brain as a "hard drive," emphasizing the machine-like quality of the original literary character.

countryside" ("Lion's Mane" 684). Yet he acknowledges that, like human beings, machines reveal individualism via specific traits. One client speaks to the impersonality of machines when she explains that her suitor (later revealed to be her scheming stepfather in disguise) preferred that she write her letters by hand because "when they were typewritten he always felt that the machine had come between us" ("A Case of Identity" 293). During the investigation, however, Holmes remarks "that a typewriter has really quite as much individuality as a man's handwriting. Unless they are quite new, no two of them write exactly alike" (301). The use of machines, the merging of humanity and technology, provides clues that are to Holmes visible, legible, and decipherable. The minute variations in people and things, along with the marginal particulars of scenes, that escape most onlookers (or overlookers) are recorded quite precisely and given meaning by Holmes, with his seemingly photographic sight. Like a detective camera he can collect images with stealth as he moves through the world. Also, like Muybridge's sequential images, he possesses "the unique ability of cinema, [of] capturing the impression of an instant of time beyond the capacity of the human eye to retain it" (Gunning "Animated Pictures" 106). Holmes is furthermore able to construct moving narrative possibilities from the impressions he captures, just as Muybridge's photographic sequences might be made to create moving picture reels.

His impressive powers of observation make the consulting detective seem like a proto-cinematic machine, as though he is himself the visual technology produced by the science of deduction, but these powers also, as several of his colleagues and clients point out, give him the equally inhuman (perhaps post-human) attributes of a magician, a wizard, even the devil. Holmes simultaneously embodies the cutting edge technology of

the late-Victorian period and the seemingly magical qualities of early proto-cinematic machinery, such as the magic lantern. In "The Adventure of the Abbey Grange," for example, Inspector Stanley Hopkins of Scotland Yard says, "I believe that you are a wizard, Mr. Holmes. I really do sometimes think that you have powers that are not human" (1027). The illustrious client featured in "The Adventure of the Second Stain" happily exclaims at the conclusion of the case, "Mr. Holmes, you are a wizard, a sorcerer!" (1059). And the Peruvian woman disproved by Holmes to be a vampire in "The Adventure of the Sussex Vampire" is relieved that the detective "seems to have powers of magic" (609). Even Watson, who knows so well the manner in which Holmes arrives at his conclusions, calls him a wizard in "The Adventure of the Retired Colourman," one of the last stories to be published (727). As is true of magic tricks, as well as of magic lantern shows, "results without causes are much more impressive," and Holmes laments, "I rather give myself away when I explain" ("Stock-Broker's Clerk" 567). Like a good magician or magic lanternist, Holmes recognizes the value of a clever performance, having "found it wise to impress clients with a sense of power" ("Blanched Soldier 539), but he also frequently seems to relish the denouement of his cases or experiments, making a dramatic final reveal that highlights both the science and the spectacle which he cinematically embodies. He puts his theatricality to use not only in dressing up and playing parts, but also when he figures something out. During his first appearance in *Scarlet*, for instance, he describes to Watson a test he has devised for identifying blood stains, after which he "bowed as if to some applauding crowd conjured up by his imagination" (8). While Holmes's seemingly magical powers and flair for the dramatic call to mind the magic of lantern shows—as Reid's description of moving

images does for Jackson in *Ripper Street*—Holmes's characterization also provides ample fodder for actors to translate to the stage or screen. The consistency of Holmes's machine-like abilities to imagine and construct crimes, however, establishes his position on the spectrum of the proto-cinematic as opposed to the solely theatrical.

As he is portrayed in the original canon, the character of Holmes is both an observing machine and observable magician, a technological and theatrical marvel that simultaneously captures and projects the precise details of the world he sees, imagines, and interprets, thus rendering the text visible and legible to readers as well. Watson's conception of Holmes as a machine is quite accurate, but he is a machine that impressively conveys artistic and essentially visual performances that might be read as proto-cinematic. Watson asserts that "like all great artists, [Holmes] lived for his art's sake," rarely accepting any compensation for his role in solving cases ("Black Peter" 885). Holmes, like an artist indeed, states, "the world is full of obvious things which nobody by any chance ever observes," and he claims his work "is the scientific use of the imagination" (Hound 28, 35). Again and again, Holmes endeavors to train Watson and the inspectors of Scotland Yard—and readers—in applying his methods, explaining that an integral component of his unique ability relies on logic and imagination: He notes Inspector Gregory's competence but suggests, "were he but gifted with imagination he might rise to great heights in his profession" and later adds, "see the value of imagination. . . . It is the one quality which Gregory lacks. We imagined what might have happened, acted upon the supposition, and find ourselves justified" ("Silver Blaze" 527, 535-36). The somewhat infamous Lestrade is not immune to Holmes's wheedling either. With tongue-in-cheek humor, Holmes announces during one investigation, "It strikes me,

my good Lestrade, as being just a trifle too obvious. . . . You do not add imagination to your other great qualities" ("Norwood Builder" 790). These moments of prodding, paired with Holmes's thorough breakdown of the manner in which he reaches his conclusions in each case, serve to invite readers to rely on their own powers of observation and imagination in reading texts both written and visual. Part of the pleasure that comes from reading or watching the Holmes stories (and other detective stories, on page or screen) is trying to solve the mystery or the crime along with the experts.

Although he continues to perform more admirably than other characters over the course of the stories, Holmes does seem hopeful that his audience has benefitted from his instruction. In "The Adventure of the Blanched Soldier," for example, Holmes narrates his own case, and after having laid out the mystery as it was conveyed to him by his client, he suggests that "it presented, as the astute reader will have already perceived, few difficulties in its solution," but, of course, Holmes proceeds to explain his "familiar method of logical analysis" for those who may need it (549). In the same story, Holmes also repeatedly reminds us that this is his straightforward narrative rather than Watson's sensational storytelling: "Alas, that I should have to show my own hand so when I tell my own story!" he exclaims after revealing how a particular smell had struck him in the moment, "It was by concealing such links in the chain that Watson was enabled to produce his meretricious finales" (551). Implying that he would really prefer his outcomes to appear obvious and/or unimpressive to clients and to readers (and perhaps denying a bit of his taste for the dramatic, which I have mentioned above), he suggests that the spectacular, seemingly magical effects of his work had largely been achieved by Watson's narrative strategies. Holmes, in his detached, machine-like manner, hints that

Watson's own abilities to observe and imagine work to engage readers. The protocinematic qualities of the Holmes stories come in part from the detective himself, who as I have shown functions as a camera-like machine that captures and constructs meaning from the visual world, but also from the crafting of narrative as achieved by Watson.

Watsonian Narrative and the Grammar of Cinematography

Dr. John Watson typically plays second fiddle to Sherlock Holmes both in scholarly treatments and in adaptations of Conan Doyle's detective stories, often occupying a subordinate or incidental position or, occasionally, no position at all. In his introductory essay to Sherlock Holmes: The Complete Novels and Stories, aptly titled "On the Significance of Boswells," Loren D. Estleman laments that Watson "has suffered mightily at the hands of scholars and the public. . ., calumniated on the one hand as a tanglefooted incompetent and on the other as a boozy Bluebeard," depictions that Estleman claims are literally made visible by screen portrayals of a bumbling version of Watson (vii). While the texts do reveal Holmes poking fun at Watson at times for his own deductive efforts—"Brilliant, Watson. You are scintillating this morning" (Valley 167) or for his overly sensationalized accounts—according to Holmes, the "fatal habit of looking at everything from the point of view of a story instead of as a scientific exercise" leads Watson to "dwell upon sensational details which may excite, but cannot possibly instruct, the reader" ("Abbey Grange" 1010)—Watson is never the comedic fool that we tend to see in older screen adaptations. ¹⁵ Despite those elements of which Holmes might

¹⁵ The more recent film and TV adaptations give Watson quite a commendable role, as he or, in the case of *Elementary*, she is often shown in a more egalitarian relationship with Holmes. *Elementary* is also noteworthy for its Joan Watson because, like the original character, she is quite capable of learning and applying Holmes's strategies for reading the visible. Like the original readership, Joan effectively gains visual literacy. Other examples of adaptations that

disapprove in the narratives, he acknowledges Watson as his biographer. Indeed, Watson does much in the way of documenting Holmes's machine-like life and work, but I argue that Watson also plays a significant role in conveying the visual literacy that helped to develop cinema-going audiences and to shape the cinematographic practices—the grammar, as it is termed in the industry—of filmmaking. Watson's strategies, in other words, shape Holmes's cases into proto-cinematic narratives.

In brief, the grammar of film or of cinematography provides a way of conceptualizing how visual narrative is constructed in terms that are analogous to writing. A still frame, for instance, is akin to a letter, while a shot (consisting of several stills) is like a word. Shots are generally recorded from the same point of view, but they can zoom in or out on the subject, creating long, medium, and close up effects. Various shots may be edited together to create a sequence (loosely analogous to a sentence) and then a scene (which is similar to a paragraph). A film is thus made up of carefully composed shots that provide information about what is happening and where and about who is seeing something or someone. A shot-reverse shot, for example, might show one character's face, then cut to another character, indicating that the two are looking at each other. The manner in which filmmakers use cinematographic techniques of constructing shots to help convey the story is, as I have begun to show, already present in the way Watson

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counteract Conan Doyle's rather misogynistic Holmes include textual reimaginings. Sabine Vanacker looks, for example, at feminized versions of Holmes adaptations, particularly "Laurie R. King's 'Mary Russell' series and the 'Irene Adler' series of Carol Nelson Douglas – [which] present the Holmes world as a woman-centred universe" (95).

¹⁶ For more on film grammar, see Roy Thompson and Christopher Bowen's *The Grammar of the Shot*. Additionally, see Christian Metz's *Film Language: A Semiotics of of the Cinema*.

narrates the Holmes stories. As he biographies the detective, Watson functions as a kind of cinematographer.

It is perhaps worth pointing out that a number of motion picture and projection devices from the 1890s were patented with names like the Biograph/e, Biokam, and Bioscope/skop, and it was the American Mutoscope and Biograph Company that produced the Sherlock Holmes Baffled motion picture. Significantly, Watson does not make an appearance in this short reel, which makes it tempting to suggest that Marvin conceived of the motion picture camera itself playing that role. An odd little silent film, Baffled uses stop replacement, a trick cinematography technique, to depict a thief disappearing and reappearing several times while Holmes confusedly stalks around with humorously exaggerated looks of surprise. Ultimately, the thief escapes by vanishing through a window with a bag full of booty as a cigar-smoking Holmes scratches his head.¹⁷ Harvey O'Brien briefly mentions this early adaptation, claiming "the 'shock' of the trick made people laugh, but it showed them what the cinema could do. . . . The collision between Holmes's steadfast rationality and the capacity of the cinema to make magical things happen made clear to audiences that the impossible is no longer something that must be ruled out" (64). While the magic of cinema in this case appears to get the better of Holmes, to baffle him despite his own seemingly magical powers, reading the camera as Watson leaves us with the impression that, as in the stories,

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¹⁷ It is possible that the failure of Holmes in this short film reflects an early use of motion pictures to engage in socio-political commentary. That the usually infallible, very British Holmes is baffled in the American-made reel could point to tensions between the two countries at the turn of the century. Several incidents related to border disputes cropped up around 1895, for example, and Zbysek Brezina notes that despite U.S. support of the British during the Boer War, many Americans developed anti-British sentiments, especially during "the presidential election of 1900" (187). See Brezina and other contributors in Hodge and Nolan.

Watson is responsible for creating much of the wizardry. While Holmes might be read as cinematic technology, Watson certainly reflects possibilities for cinematic narrativity. Even as Holmes displays his own camera-like qualities throughout the canon, it is Dr. Watson who captures and composes, splices and edits, projects and promotes the raw footage into wildly popular narratives that, again despite Holmes's assertions to the contrary, were instructive as well as entertaining.

A testament to his own visual and narrative skills, Conan Doyle attributes to Watson admirable observational and storytelling techniques that produce brief but complex stories drawing on a number of written forms and generic traditions, including of course earlier manifestations of the mystery and detection fiction as well as the Gothic and sensation fiction. In an essay on filmmakers' interpretations of the Gothic conventions evident in *The Hound of the Baskervilles*, Terry Scarborough asserts, "as [Conan] Doyle and his contemporaries appropriated elements of the Gothic tale and other popular genres to suit a late-Victorian readership, Sherlock Holmes emerges today as a champion of the popular narrative whose diversity is often based in Gothic conventions and tropes" (49). As with the works discussed in previous chapters, I find that narrative moments having a Gothic flavor are often also proto/cinematic in the Holmes stories, as such moments emphasize vision while constructing distinctly optical effects.

Certainly, *The Hound*, which appeared serially in *The Strand* from August 1901 to April 1902, is probably the most popular Holmes story and the one most permeated by Gothic conventions, making it a particularly useful case study for cinematic narrative moments as constructed by Watson. It is possible that some of these moments actually attempt to emulate cinematographic effects that Conan Doyle had seen himself. An effect

similar to the stop-replacement trickery used in *Baffled* occurs within the first few pages of *The Hound*, for example. Holmes asks Watson to try his hand at deduction by investigating the walking stick left in their flat by Dr. Mortimer. After Watson examines the stick and gives his assessment of its owner to Holmes, the detective—in typical fashion—proceeds to dismantle Watson's appraisal. Holmes says, "so your grave, middle-aged family practitioner vanishes into thin air, my dear Watson, and there emerges a young fellow under thirty, amiable, unambitious, absent-minded, and the possessor of a favourite dog, which I should describe roughly as being larger than a terrier and smaller than a mastiff" (7-8). Much like the thief in the early motion picture, the man Watson imagines based on his reading of the visual evidence "vanishes into thin air" and is replaced by Holmes's more accurately depicted figure. It is difficult to know whether Conan Doyle had this particular filmic effect in mind, but he was certainly considering the ramifications of disappearance and reappearance in *The Hound* in ways that can be read as filmic.¹⁸

The novel occupies a unique position in the Holmes canon, as eight years prior to the appearance of the famous Dartmoor adventure, Conan Doyle had killed off his detective in "The Final Problem" (Dec. 1893). A disappointed public clamored for the return of their beloved Holmes, and Conan Doyle eventually responded with *The Hound*, which is set before the character's death but, nevertheless, resurrects him in a kind of

¹⁸ I have, at this point, been unable to confirm whether Conan Doyle was aware of or had seen the *Sherlock Holmes Baffled* reel, but it is worth noting here that the short film was produced in April of 1900 (see McKuras), over a year before the first installment of *The Hound* was published in *The Strand*. It is possible that Holmes's first motion picture appearance influenced Conan Doyle's writing as he brought the character back to literary life.

postmortem portrait that gave him the (re)appearance of life in death. The story thus offered readers in the early years of a new century the opportunity to revisit both Holmes and their own waning Victorian past. The Gothicism evident in Conan Doyle's latest work was, perhaps, designed to evoke memories of a now bygone era and highlight the potential dangers of moving into an uncertain and unexplored future. Gunning links perceptions of futurity to the spectral, ghostlike nature of cinematic technologies, noting that, while film history might lead us to believe that "the first viewers of cinema [experienced] gaping astonishment at this new master of realism and technology," it is quite likely that initial viewers were often unsettled and disturbed by "the spectre-like monochrome and silent films themselves..., appearing like harbingers of an uncertain future" ("Animated Pictures" 100). This notion is particularly relevant in considering *The* Hound, as Queen Victoria had died in January of 1901, several months before the publication of the novel's first installment. Her funereal procession was heavily documented photographically, and it was also recorded cinematically by multiple filmmaking companies. ¹⁹ The ancient, unheimlich setting of Devonshire and the reappearance of the Baskerville's curse contrasts with and calls attention to the period's contemporary, yet also uncanny, modes of seeing and communicating. The Gothic qualities of the novel also intensify the underlying energies of modern visual innovations and reflect the presence of ghostly possibilities for motion, as did Muybridge's photographic animal studies.

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¹⁹ The British Film Institute (BFI) holds the extant footage, which consists of only about five minutes of film. The BFI notes that at least seven companies filmed the event, making the amount of lost footage quite significant and devastating. The remaining clips can be viewed on the BFI Player at http://player.bfi.org.uk.

Holmes's cases are nearly always presented to him by a client in person or via a communication of some sort, and Watson frequently embeds a variety of these texts into his narratives, generating interest in the investigation to come and serving as a kind of scrapbook preserved by Watson's documentation. Tales told by clients, telegrams, letters, and other documents, even the occasional visual aid like a map or cryptic and atavistic drawings of stick figures (Figure 17) pepper the canon, thus giving Watson's stories not only authenticity and verisimilitude, but also filmic shifts in point of view that provide readers an opportunity to join in the detection.²⁰

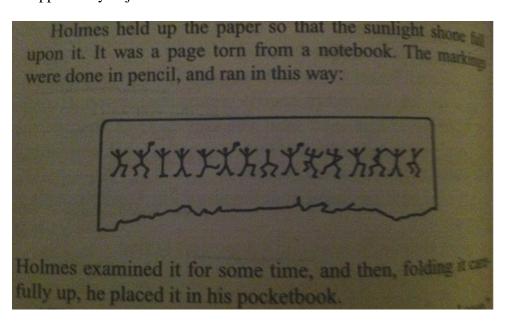


Figure 17. Dancing men.

Image produced by author ("Dancing Men" 813).

In the "The Adventure of the Dancing Men," Holmes initially describes the figures shown above as "absurd little figures dancing across the paper upon which they are drawn" (808). Of course, Holmes later decodes the messages represented by the series

²⁰ It is quite common to see the inclusion of embedded texts in movies and TV shows now, and adaptations of Holmes frequently employ this technique. We often share in viewing computer screens or text messages, for instance, in *Sherlock* and *Elementary*.

of figures, which each stand for a letter of the alphabet. This embedded visual is of particular interest given the latent kinetic energy the figures seem to contain, recalling Muybridge's image sequences. Motion pictures and language converge in the simple drawings, which are themselves signifiers of words (the full message threatens "Elsie prepare to meet thy god") but also images that visually describe a dance.

In *The Hound*, one such embedded text is the 1742 manuscript penned by an heir of Hugo Baskerville and entrusted to Dr. Mortimer by Sir Charles Baskerville prior to his death. In Watson's narrative, Dr. Mortimer reads the manuscript to him and Holmes, directly after which the detective reads a newspaper clipping that details the death of Sir Charles. Again pitting the past against the present in Gothic form, these embedded texts also present cinematic possibilities for establishing sequences of narrative flashback depicting each account, possibly also prefiguring the use of voiceover techniques.

Watson's narrative dexterity creates a range of uncannily cinematic effects and moods throughout the canon, but notably in *The Hound*. For instance, he describes landscapes in economical, yet beautifully visual language, setting scenes both rural and urban with a precision and motion that resembles establishing shots in film. In *The Hound*, for example, Watson gives a cinematic description of his first glimpse of Dartmoor, as seen from a carriage window as he and Henry Baskerville arrive: "Over the green squares of the fields and the low curve of a wood there rose in the distance a grey, melancholy hill, with a strange jagged summit, dim and vague in the distance, like some fantastic landscape in a dream" (55). Lovely and looming, we travel over the dreamlike scene, zooming slowly in and focusing finally on the distant background features, thus setting the stage for the events that take place in the remainder of the novel. Watson is

also quite good at creating rising tension and depicting moments of terror. Toward the end of the novel, he emphasizes his increasing discomfort during a conversation he has with Holmes, punctuating the dialogue with interjections that position us with him as viewers faced with something terrifying but not quite visible: "I seemed to see something terrible. . . . The shape of some monstrous villainy, half seen, half guessed, loomed through the darkness which had girt me so long. . . . The darkness was rising, but much was still hidden by the shadows. . . . The last red streaks had faded away in the west and night had settled upon the moor" (124-25). Here, Watson's shadowy grasping of the horrible crime and its perpetrator becomes merged with the setting as night descends, creating an effect very much like a filmic sequence that utilizes script, scene, and color palette (and probably musical score) to establish a mood of uncertainty and fear. Highly attuned to his surroundings and feelings, Watson is in his way as observant as Holmes, despite the latter's frequent admonitions to Watson: "You see, but you do not observe" ("A Scandal" 241). Indeed, Watson, along with the readers he instructs, does improve in his ability to observe and read the visual. Even as Watson admits to being "always conscious of the gap between" himself and the detective, he displays in his storytelling a keen awareness of how to construct and unravel a mystery in which readers can participate, practicing their own deductive powers and strengthening their visual acuity ("Illustrious Client 529). Through the Watsonian narrative, the Holmes stories provided original audiences with exemplary models of imaginative rational thinking grounded in the reading of visual texts. The stories also prepared readers to comprehend the emerging grammar of narrative filmmaking, thus paving the way for our current culture of simultaneously reading and viewing.

Holmes and Televisual Media

At the beginning of this chapter, I suggested that television is and has been an ideal medium for adaptations of Conan Doyle's characters. TV is not generally included in histories of proto-cinema or film, largely because the technological components and scientific histories differ. Properly considered as part of the development of the telegraph and the telephone, the earliest televisual images were transmitted via wires in the late nineteenth century, and cathode rays were experimented with in the early years of the twentieth century. Nevertheless, the first demonstrations of two variations, one mechanical and one electrical, were not made until the 1920s. The commercial reality of TV, as we tend now to nostalgically remember it, occurred beginning in the late 1940s and has continued, albeit with new kinds of screens and modes of signal transfer. 21 I wish to situate modern TV culture along a filmic spectrum here, however, as the apparatus does produce for viewers moving images, which are viewed in a manner similar to a film but usually in a private rather than public setting. As with the optical toys in so many Victorian parlors, TV has been our go-to for the domestic consumption of visual material.²²

Of course, movies are frequently viewed at home on a TV screen. Gunning remarks on our current perspective on the relationship between the two when he notes that "cinema is now inconceivable on many levels without television," but he warns also that it "should not produce the illusion that this new medium has a stable identity. It is a

²¹ For an extensive history of television see Barnouw.

²² While most homes in the Western world probably have a TV at this point, television sets are becoming obsolete due to the rise of mobile viewing practices that rely on smartphones, tablets, laptops, and other devices. For a fascinating discussion of these trends, see Chambers.

grave mistake to analyse television primarily in terms of the material produced for it . . . rather than as a domestic form of access to a range of various programs offered simultaneously" ("Animated Pictures" 109-10). He goes on to suggest that "[t]elevision seems less involved with intensifying vision than with providing immediate access to anything whatsoever" (110). While he might question the practical value of the current programmatic offerings, Conan Doyle's Holmes would likely appreciate the sheer wealth of information potential presented by TV, which seems to store endless supplies of content, as does his mind.

In its introduction to the updated Holmes, the "Pilot" episode of *Elementary* appears to acknowledge this connection, as Holmes is portrayed viewing several large TV screens simultaneously, each broadcasting a different program. Upon Joan Watson's entry into the room, Holmes (relying on a fairly recent development in television capabilities) pauses everything and proceeds to deliver a seductive monologue, apparently to Watson. Instantly, Holmes rewinds and plays one screen, on which a young man gives the same monologue. "Spot on," Holmes declares. A televised Holmes, utilizing television to keep his mind sharp is not, I think, a strictly modernized adaptation of Conan Doyle's character. In closing this chapter, I look briefly at several scenes in the Holmes canon that reveal an anticipation of TV and an engagement with its emerging possibilities in the early years of the twentieth century.

Again, *The Hound* is an exemplary text in this regard. Its narrative Gothicism and Holmes's methods combine to suggest televisual elements. In an early scene of the novel, for instance, Watson returns to Baker Street from his club, where he has spent several hours as, in Holmes's phrasing, "a fixture," recalling static photographic terminology as

well as anticipating the notion of a TV set as a household furnishing (28). The two commence a dialogue, in which Holmes explains how he has utilized the day preparing to take on their mysterious case:

'I have been to Devonshire.'

'In spirit?'

'Exactly. My body has remained in this armchair; and has, I regret to observe, consumed in my absence two large pots of coffee and an incredible amount of tobacco. After you left I sent down to Stanford's for the Ordnance map of this portion of the moor, and my spirit has hovered over it all day. I flatter myself that I could find my way about.' (28)

With the help of a "large-scale map," Holmes is spiritually transported to Devonshire, while he remains physically situated in one spot at home (28). In his meditative state of mental visualization, he engages in what might be described as an out-of-body experience. As a spiritualist, Conan Doyle was likely familiar with and interested in such things, and perhaps he had this in mind when writing. As a scientist, however, he was also familiar with paranormal research that overlapped early research in television. Prior to writing *The Hound*, for instance, he was in contact with "Professor Oliver Lodge, a leading physicist who kept up the tradition of prominent scientists investigating the paranormal" who was "making significant discoveries about the capacity of electromagnetic waves to send messages without wires" (Lycett 148). As Holmes sits in his chair gazing upon the map, he seems to be communing with the location wirelessly, seeing the place as if on a virtual tour of it in a textual moment that constructs television and prefigures the mid-twentieth-century experience of watching it. From the comfort of

his own sitting room, Holmes views a distant sight, interacting with it in such a way that he feels present in the setting, on "the stage upon which tragedy has been played, and upon which we may help to play it again" (29). In *The Hound*, Holmes's theatricality merges with visual communication technologies in ways that sniff out preliminary models of teleplay and television.

This scene also foretells a later occurrence in the novel, when Watson sees Holmes—though he does not yet know it is the detective—in a similar position:

... I saw the figure of a man upon the tor. Do not think that it was a delusion, Holmes. I assure you that I have never in my life seen anything more clearly. As far as I could judge, the figure was that of a tall, thin man. He stood with his legs a little separated, his arms folded, his head bowed, as if he were brooding over that enormous wilderness of peat and granite which lay behind him. He might have been the very spirit of that terrible place. (97)

Having moved from the domestic space of his sitting room into the actual landscape of the moors, Holmes is again looking out, hovering, over Devonshire, and the scene is linked to the previous incarnation via Holmes's position as well as the repetition of the notion that he is connected to the place in spirit. We imagine that his acute visual sensibilities pick up details in a manner akin to Frankland using his telescope, "a formidable instrument mounted upon a tripod, [standing] upon the flat leads of the house" (117). In this instance, however, it is Watson whose telescopic, photographic sight picks out and records the minute details of the unknown and unknowing figure's stature and stance. Recalling Nead's discussion of the ubiquity of cameras, particularly the detective camera, which in its invisibility, "creat[ed] an environment that was always alive to the

presence of a camera" (114), this passage presents two men in the process of gathering surveillance footage. Holmes later tells Watson that he had intended to remain unseen, had been "so imprudent as to allow the moon to rise behind [him]" (122), but Watson's quick eye nevertheless perceives the figure. Although Watson is not immediately aware of Holmes's identity, the careful reader will apply both logic and imagination, therefore seeing Holmes at his elevated vantage point, like the televised Holmes standing over and watching the many TV sets in *Elementary*. Conan Doyle thus repeats several times the panoptic tableau in which an individual watches a scene from some distance, prefiguring the domesticized process of watching television and its eventual spread.

A similar example occurs in "The Adventure of the Empty House," published in 1903 following *The Hound*. This story brings Holmes back to life by explaining that he did not, in fact, die at the Reichenbach Fall, but climbed upwards after sending Moriarty over the edge (765-66). Back in London, Holmes is being hunted by Moriarty's compatriot, Colonel Sebastian Moran, and takes Watson to the house across from 221 B Baker Street to lay a trap for him. Holmes has had an uncanny double of himself crafted in a wax bust by a Frenchman and has strategically placed it in the Baker Street window. Upon first seeing the dummy, Watson is amazed:

I gave a gasp and a cry of amazement. The blind was down, and a strong light was burning in the room. The shadow of a man who was seated in a chair within was thrown in hard, black outline upon the luminous screen of the window. . . . [T]he effect was that of those black silhouettes which our grandparents loved to frame. It was a perfect reproduction of Holmes. (770)

Although Watson here compares the effect of this scene to an older form of portraiture, there is certainly a televisual quality to the "luminous screen" and box-like nature of the room. Additionally, after watching, distracted, for some time, Watson realizes "the shadow has moved!" and Holmes explains that, in order to keep Moran thinking the waxwork is actually him, "Mrs. Hudson has made some change in that figure eight times [in two hours], or once in every quarter of an hour. She works it from the front, so that her shadow may never be seen" (772). Like an adept puppeteer, Holmes's diligent landlady assists in the illusion, and the two men positioned in the empty house watch "that brilliant yellow screen . . . with the black figure outlined upon its center" (772). As in the scene from *The Hound*, this narrative moment simultaneously merges theatrical performance and staging with as yet unseen but emerging televisual possibilities. Wynne comments on this moment, claiming the wax bust "represents an immortality of sorts as the detective, Watson and the reader observe Holmes's simulation lure a criminal to justice" (5). Connecting this notion of immortality to both the Holmes museum in London (which has a dummy in its window) and to screen adaptations, Wynne continues by briefly referencing one of the original illustrations to the story: "Further prefiguring the stories' filmic afterlife, one of [Sidney] Paget's illustrations depicts Holmes and Watson, like spectators at a movie, looking out of the window of the empty house at the detective's fake silhouette, framed by the Baker Street casement" (5). This illustration is, I think, remarkable not only for its cinematic visuality, conveyed in the monochrome that Gunning has noted must have been unsettling for late-Victorian audiences, but also for the ways it emphasizes the televisual elements I point out in the narrative (Figure 18).

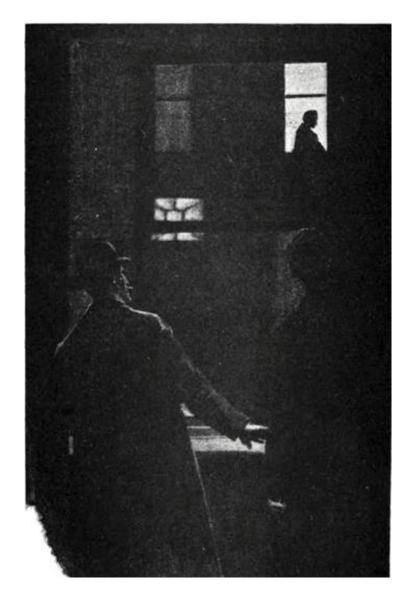


Figure 18. "I crept forward and looked at the familiar window."

Illustration by Sidney Paget for "The Adventure of the Empty House." Image from *Internet Archive* and retrieved from *The Victorian Web* at http://www.victorianweb.org/art/illustration/pagets/266.html. *The Victorian Web* notes "This image may be used without prior permission for any scholarly or educational purpose."

Unlike a film, for example, there is no evidence in Paget's illustration of projected light casting an image onto a screen. Rather, the light emanates from within the Baker Street room, seeming to glow from inside and behind like a TV screen. The repetition of multiple squares and rectangular shapes in the image emphasizes the boxing of various

content available simultaneously, and we can make out what seems to be a second glowing window across the street. But even as Holmes and Watson are depicted as gazing at the distance sight, we gaze at them and realize their boxed room is also glowing from within, making us, finally, like the Holmes in *Elementary* who consumes so much information from so many simultaneously playing programs. The Holmes stories not only participate in the development of cinema, but they also anticipate the televisual narrative mode of serialization as well as the manner in which audiences consume moving narratives. The latter is particularly interesting given the profusion of crime procedural and detective programs currently on air. Reading the Holmes stories as proto-cinematic and proto-televisual allows us to see that crime fiction itself might be read as distinctly proto-cinematic genre.

In responding to and anticipating emerging technologies, the Sherlock Holmes canon is ideal for screen adaptation. Conan Doyle envisioned and navigated nascent cinematic processes that had not yet been fully integrated into the social and cultural fabric at the turn of the twentieth century. As we have seen, Holmes not only embodies existing technologies, but he also relies on emerging technologies such as television, the hidden energies of which can be detected narratively and metaphorically in the texts.

More than any other proto-cinematic literature, the Holmes canon bridged the cinematic processes of the nineteenth and twentieth centuries and looked forward not only to filmic adaptations, but also to the ways in which characters would be at home with and on TV. Reading visuality in Conan Doyle's texts in this way gives the author a heretofore unacknowledged place in the history and process of filmmaking and reveals the significant influence that his work had—and continues to have—on readers' viewing

practices. Indeed, our readings of both the original Holmes stories and their various adaptations continue to make us interrogate the past and the present, seeking truths that we might read and see in textual/visual evidence. At the same time, the stories encourage us to envision moving forward and looking ahead to developments in communications and visual media. At the conclusion of *The Hound of the Baskervilles*, with its heavily Gothic sensibilities, Holmes claims, "the past and the present are within the field of my inquiry, but what a man may do in the future is a hard question to answer" (165). In the final lines of *The Valley of Fear*, however, Watson suggests that the detective is indeed pondering how to answer that question. Holmes explains to Watson and Inspector Barker that Professor Moriarty's network is expansive and dangerous, that "the coming danger [is] greater than the past" (321). But Holmes also exudes confidence in his potential to eventually collar "this king devil," for Watson observes that "his eyes seemed to be looking far into the future," and were "strain[ing] to pierce the veil" (321). While even Holmes cannot know with surety the future and what is beyond the veil of time and perhaps space, he and Watson help to educate us in how to detect and read the forthcoming visible world and its potentially threatening networks. Holmesian and Watsonian progeny abound, in *Ripper Street* and in many other venues, and these too help us learn to navigate new viewing practices and to understand with greater certainty the continued fascination we seem to have with screening nineteenth-century literature.

CHAPTER VI - CONCLUSION

"A SCROLL OF LIGHTED PICTURES":

NINETEENTH-CENTURY BRITISH FICTION

AND NEO-VICTORIAN SCREEN CULTURE

Neo-Victorianism is by nature quintessentially Gothic: resurrecting the ghost(s) of the past, searching out its dark secrets and shameful mysteries, insisting obsessively on the lurid details of Victorian life, reliving the period's nightmares and traumas. At the same time, neo-Victorianism also tries to understand the nineteenth century as the contemporary self's uncanny Doppelgänger, exploring the uncertain limits between what is vanished (dead) and surviving (still living), celebrating the persistence of the bygone even while lauding the demise of some of the period's most oppressive aspects, like institutionalised slavery and legally sanctioned sexism and racism. Such are the very Gothic constitutive features of neo-Victorianism.

—Marie-Luise Kohlke and Christian Gutleben (2012)¹

This project has considered the ways in which nineteenth-century British fiction participated in the ongoing development of filmic technologies and cinematographic strategies. My readings of the texts included here have demonstrated that writers of the period were very much involved with visual culture and the shifting modes of visuality that were brought about by the evolution of science and its technological apparatus. Indeed, I have shown that Mary Shelley, Charles Dickens, Emily Brönte, Lewis Carroll/Charles Dodgson, and Arthur Conan Doyle produced work that not only engaged with the visual effects of proto-cinematic devices contemporary to them, but also often anticipated emerging forms of technology and viewing practices, as well as techniques for screening narrativity. As mentioned in the Introduction, the texts included here are

¹ Kohlke and Gutleben, "The (Mis)Shapes of Neo-Victorian Gothic: Continuations, Adaptations, Transformations," in *Neo-Victorian Gothic: Horror, Violence and Degeneration in the Re-Imagined Nineteenth Century*, ed. Kohlke and Gutleben (Amsterdam: Rodopi, 2012) 4. Emphasis in original.

exemplary of a much wider network; that is, they are representative of a mutually influential relationship between fiction and the proto/cinematic that was—and still is—widespread.

Throughout this project, I have also been suggesting that one element of the mutually informative relationship between fiction and film is that during the nineteenth century readers were becoming viewers. The proto-cinematic narrative qualities that I have discussed here encouraged reading experiences that were highly visual and immersive. This is not to say that there is no distinction to be made between reading and watching, and I am certainly not claiming that the Victorians' brains functioned differently from ours on a neurological level. What I have been attempting to demonstrate, however, is that proto-cinematic narrative helped to establish the *desire* for moving pictures and participated in the cultural shift toward the normalization and consumption of cinematic images.

The continuous modification of nineteenth-century narratives for the screen is one clear indication that cinematic possibilities always already existed within the original texts. In addition to seemingly constant adaptations of the works of Shelley, Dickens, the Brontës, Carroll/Dodgson, and Conan Doyle, there abounds a slough of reimaginings of works by Jane Austen, Elizabeth Gaskell, Robert Louis Stevenson, Bram Stoker, and other nineteenth-century writers. As with any creative adaptation, however, these versions typically reflect the cultural realities of the time and place of their production and in so doing alter the content of the source texts to varying degrees. In recent years, such adaptations have tended to take a significant departure from any strict adherence to faithfully reproducing plots and, instead, use nineteenth-century texts as a starting point

for re-imagining narratives, characters, and the Victorian period itself. I have already noted this trajectory, particularly in relation to the Alice books and the most recent films, as well as the Sherlock Holmes canon and a number of new screen manifestations.

Scholarly conversations about this phenomenon of cinematic re-imagining began in the mid-1990s when Garrett Stewart published his article "Film's Victorian Retrofit." In 2000, Dianne F. Sadoff and John Kucich initiated "a discussion of postmodernism's privileging of the Victorian as its historical 'other'" with their essay collection *Victorian Afterlife: Postmodern Culture Rewrites the Nineteenth Century*, which widened the discourse across media to include contemporary literature and art, as well as cinema and television (xi). Since then, an interdisciplinary academic niche has developed to explore the ongoing trajectory of what scholars have taken to calling "neo-Victorianism."

As the epigraph borrowed from Marie-Luise Kohlke and Christian Gutleben makes clear, this neo-Victorian trend of reengaging with the nineteenth century in our current popular culture is both celebratory and interrogatory: while there is, perhaps, some sense of nostalgia at play in looking back on the past, there is also a haunting sense of discomfiture to navigate. We seem culturally to take pride in acknowledging that several unsavory facets of the nineteenth century have been dismantled or at least diminished (thereby revealing our progress and distance/difference from the Victorians),

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² Neo-Victorian Studies was established in 2008 as "a peer-reviewed, inter-disciplinary eJournal dedicated to the exploration of the contemporary fascination with re-imagining the nineteenth century and its varied literary, artistic, socio-political and historical contexts in both British and international frameworks. Perhaps most evident in the proliferation of so-called neo-Victorian novels, the trend is also discernible in a recent abundance of nineteenth century biographies, the continuing allure of art movements such as the pre-Raphaelites, popular cinema productions and TV adaptations, and historical re-evaluations in such fields as medicine, psychology, sexology, and studies in cultural memory" ("Aims and Scope" par. 1).

even as we simultaneously cringe over the fact that Victorian "nightmares and traumas" continue to be our own in many ways (thus indicative of our continued proximity to the period). For Kohlke and Gutleben, neo-Victorian cultural productions inherently possess and enact qualities of the Gothic, emphasizing the unstable boundaries between past and present and highlighting the blurry lines between them and us. As I have shown, the manner in which nineteenth-century writers crafted proto-cinematic fiction is also largely Gothic, unsettling the distinctions between reality and perception and suggesting a slippage between textuality and visuality.

To be sure, our interest in—maybe even obsession over—the neo-Victorian has been made explicitly Gothic of late with several television series that re-imagine nineteenth-century Gothic fiction. Cancelled after a single season of ten episodes, Dracula aired in both the US (on NBC) and the UK (on Sky Living) from October of 2013 to January of 2014. While the series did not generate enough public hype to continue, it is a fascinating example of how neo-Victorian screen adaptations convey recognition of the intersection between nineteenth-century literature and technology. In the case of *Dracula*, the titular figure takes on the persona of an American entrepreneur in order to navigate late-Victorian society. As Alexander Grayson, he meets characters present in the original novel, including Jonathan and Mina Harker and Lucy Westenra. Van Helsing, too, occupies a prominent role in the series, though here he works with the vampire for a time, resurrecting him in the pilot episode and helping him attempt to concoct a vaccine for vampirism. Significantly, one of the main plot arcs of the sole season involves Grayson orchestrating a demonstration to publicize wireless electricity, a form of illumination that defies reliance on the sun (which is, of course, problematic for

Dracula). The season/series finale plunges Grayson's technological marvel into oblivion, as the demonstration is sabotaged, killing a large group of people holding wireless bulbs. The short-lived series thus offers an intriguing, though unfinished, commentary on how Victorian narrative encourages extrapolative meaning making in the twenty-first century. One way to read the final episode of *Dracula*, for instance, is as an acknowledgement of important figures—such as Nikola Tesla—who have not been remembered for their scientific and technological contributions as often as, say, Edison (or the Lumiére brothers). Another way to read the finale is as a sophisticated interrogation of the seen and the unseen during the Victorian period; while a wireless electric network was not quite possible, other invisible networks were certainly functioning, such as the one linking narrative fiction and proto-cinematic devices. In the final episode, there is certainly also the very neo-Victorian quality of exploring the present through the past; the fatal wireless demonstration is suggestive of the dangers inherent to our use of the Internet, for example. We are encouraged to question the benefits of such a system in relation to its potential to cause devastating effects. The series thus reasserts our still-Victorian cultural privileges and concerns as it draws attention to the very nature of visuality through the use of the light bulbs figuring the distribution of information and images made possible by the Internet.

Another very recent television series, *Penny Dreadful* (2014-2016), proved to be far more popular with viewers than *Dracula*, despite the programs' similar approaches to re-imagining nineteenth-century texts as a way of interrogating our present. *Penny Dreadful* aired its three seasons on Showtime in the US and Sky Atlantic in the UK, establishing a large following in both countries. The show, with its titular homage to the

serialized stories of mayhem and mystery popular during the latter half of the nineteenth century, is set in 1891 London and presents a dark narrative treatment of issues both Victorian and contemporary. Current concerns over mental health, sexuality, race, and other topics are explored through the interactions of characters both original and reimagined. Victor Frankenstein (who creates not one, but three monsters), Dorian Grey, Dracula, and Dr. Jekyll, for example, are brought to new screen life together in the series. The mingling of these characters—whose origins are temporally and narratively distinct—reflects the ways in which we are, perhaps, guilty of clumping together or categorizing parts of the past from our vantage point in the present, pointing to a general tendency to forget or ignore the nuances of historicity. The merging of the worlds of the characters also reveals, however, that particularly neo-Victorian method of bridging time and unsettling the boundaries between old and new. Significantly, *Penny Dreadful*'s success suggests that, again like the Victorians, we are still fascinated by narratives overflowing with the sensational, the Gothic, the visual. Structurally speaking, the show (like any series, really) also points to how accustomed we are to the serialized, episodic dissemination of narrative. Interestingly, the series finale generated a response from viewers similar to that of readers of Sherlock Holmes: they clamored for more despite assertions from *Penny Dreadful*'s creator, John Logan, that the show had run its full course (Patten). Like the famous triple-decker Victorian novel, then, the series ended with its third season or volume, a choice that I think is not merely coincidental.

Indeed, Logan seems to have been very much aware of how to successfully draw together the nineteenth and twenty-first centuries on screen. As viewers, we are consistently pushed to acknowledge our relationship to the past, to see ourselves as the

Victorian characters, whether new or old. The main plot arc of the series follows Vanessa Ives (Eva Green), an invented character without any specific textual origin. A troubled, yet persistent woman, Vanessa struggles throughout the series with issues of faith and mental health. She experiences demonic possession multiple times and is relentlessly pursued by Dracula (who, like the other Dracula discussed above, operates under a persona). In Vanessa, then, the average person is combined with the stuff of the sensational and the Gothic. It is through her that we are often prompted to see ourselves as still Victorian. She asks Sembene (Danny Sapani), for instance "do you believe that the past can return?" ("Fresh Hell"). Sembene, an African who is both friend and voluntary servant/ally to Sir Malcom Murray (Timothy Dalton), Mina's father and Vanessa's surrogate father figure, asserts in reply, "more than that. It never leaves us. . . . It is who we are." Vanessa's question and Sembene's response linger with us, forcing us not only to contemplate, but also to see the ways in which we have inherited our cultural identity from the Victorians.

A remarkable example of our inherited modes of seeing and viewing practices occurs in season three of *Penny Dreadful*, in an episode titled "Predators Far and Near." Encouraged by her hypnotherapist, Dr. Seward (a character from Stoker's *Dracula* recast here as an American woman and ingeniously played by Patti LuPone), to do something unexpected and enjoyable, Vanessa asks zoologist Dr. Alexander Sweet (Christian Camargo) to go out for an evening. Dr. Sweet is actually Dracula and is plotting to lure Vanessa into his clutches, but she has not yet discovered this and finds him charming. Significantly, the evening out that she arranges consists of taking him to a magic lantern show. As the pair watches a fascinating proto-cinematic rendition of Jules Verne's 20,000

Leagues under the Sea, we recognize that we, too, are enraptured by the moving images on our own screen. In viewing both the magic lantern show and the television program itself, we are encouraged to see that nineteenth-century text and technology was always interrelated and that our current viewing practices and preferences continue to emphasize that connection. Seeing proto-cinematic apparatus on our (perhaps now) post-cinematic screens is not, I think, for merely novel purposes, but serves to highlight a growing acknowledgement in the entertainment industry of the proto-cinematic qualities of nineteenth-century fiction, for which I have been arguing.³

Neo-Victorian texts, such as the *Dracula* and *Penny Dreadful* television series, display a consistent recognition of how well-suited nineteenth-century literature is—has always been—to visual adaptation. In a sense, these re-imaginings perform work similar to what I have attempted throughout this project: a laying bare of how we might read nineteenth-century fiction in terms of visual culture and proto-cinematic technologies. This methodology contributes not only to the efforts of film historians and media scholars to unearth the importance and influence of artifacts like the optical toys I have discussed here, but also (in reverse fashion) to English studies and the work of literature scholars to continue finding unexplored avenues for textual analysis. More concretely, the framework I offer here allows further investigation of how nineteenth-century fiction, as well as later textual productions, function in visual culture as a mode of seeing and a

³ Indeed, proto-cinematic devices are cropping up with some frequency in movies and television programs, as well as in online articles. In Sam Raimi's 2013 *Great and Powerful Oz* adaptation, for example, a praxinoscope features prominently. Similarly, a zoetrope makes an appearance in James Watkins's 2012 *The Woman in Black*, which adapts Susan Hill's 1983 neo-Victorian novel of the same name.

form of optical device, whether proto-cinematic or cinematic. Later research might include, for example, more thorough treatments of texts that engage particularly with what I have called here thaumatropic and stereoscopic narratives, as well as texts that demonstrate specifically phenakistoscopic, zoetropic, or praxinoscopic techniques.

Additionally, my work here creates room for explorations of how neo-Victorian texts call attention to the proto-cinematic and the development of our own viewing practices.

To reiterate the concepts for which I have been arguing, I close with two final examples of proto-cinematic narrative in nineteenth-century texts. While I have focused here on British fiction, proto-cinematic narrative is certainly evident in a transatlantic context, and further scholarship is needed to address the more global applications of my methodology. Nathanial Hawthorne's work, for instance, is rife with moments that reflect the prevalence of proto-cinematic technologies in America. In "The Birth-Mark," originally published in 1843, Hawthorne seems to follow Mary Shelley's lead by creating a character very like Victor Frankenstein, whose ambition and pursuit of science leads him to obsess over how he might assert authority over human nature. In the case of Hawthorne's man of science, Aylmer is driven to monomania over the constant visual reminder of what he perceives as his wife, Georgiana's, only flaw: a small, crimson birthmark. Georgiana eventually concedes to undergo a variety of experiments that Aylmer insists will eradicate the mark. At one point, "in order to soothe Georgiana" from the exertion of the ongoing procedures, Aylmer administers some unknown "playful secrets which science had taught him" (Hawthorne 217). Presumably an injection or inhalant, this treatment gives Georgiana hallucinations that are described in protocinematic terms:

Airy figures, absolutely bodiless ideas, and forms of unsubstantial beauty came and danced before her, imprinting their momentary footsteps on beams of light. Though she had some indistinct idea of the method of these optical phenomena, still the illusion was almost perfect enough to warrant the belief that her husband possessed sway over the spiritual world. Then again, when she felt a wish to look forth from her seclusion, immediately, as if her thoughts were answered, the procession of external existence flitted across a screen. The scenery and the figures of actual life were perfectly represented, but with that bewitching, yet indescribable difference which always makes a picture, an image, or a shadow so much more attractive than the original. (Hawthorne 217)

Georgiana sees illusory figures moving about before her, dancing as though animated by a magic lantern, phenakistoscope, or other device. The notion of "imprinting" seems suggestive of nineteenth-century concepts of persistence of vision, as demonstrated by the thaumatrope. The "almost perfect" illusions make her think of Aylmer as a magician, sorcerer, or spiritual medium, thus drawing attention to the slippage between reality and fantasy that proto-cinematic technologies encourage. Georgiana's perception shifts to encompass even more "perfectly represented" realities of "actual life" that move "across a screen" in a manner eerily similar to the motion pictures that would arrive decades after Hawthorne's story was published. Here, too, Georgiana observes a "bewitching" quality to the moving images that recalls the *photogénie* discussed in the previous chapter. As with the British writers discussed throughout this project, it is quite clear that Hawthorne's fiction was influenced by the increasingly visual culture around him. As

noted above, my project creates ample room to more fully examine how proto-cinematic narrative functions in the fiction of countries other than Britain.

Finally, I leave my readers with some moving words from Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886). In Stevenson's novella, Mr. Utterson is intrigued by the account of Hyde trampling a small child, as relayed by Mr. Enfield, whose "tale went by before his [Utterson's] mind in a scroll of lighted pictures" (8). This narrative moment simultaneously looks ahead to motion pictures, encompasses all the spectacular effects made possible by proto-cinematic devices, and suggests that human beings can't help but visualize and put into motion the stories we encounter.

APPENDIX - Lewis Carroll's Alice Poems

Prefatory Poem to Wonderland

All in the golden afternoon
Full leisurely we glide;
For both our oars, with little skill,
By little arms are plied,
While little hands make vain pretence
Our wanderings to guide.

Ah, cruel Three! In such an hour,
Beneath such dreamy weather,
To beg a tale of breath too weak
To stir the tiniest feather!
Yet what can one poor voice avail
Against three tongues together?

Imperious Prima flashes forth
Her edict 'to begin it'—
In gentler tone Secunda hopes
'There will be nonsense in it'—
While Tertia interrupts the tale
Not *more* than once a minute.

Anon, to sudden silence won,
In fancy they pursue
The dream-child moving through a land
Of wonders wild and new,
In friendly chat with bird or beast—
And half believe it true.

And ever, as the story drained
The wells of fancy dry,
And faintly strove that weary one
To put the subject by,
"The rest next time—" "It is next time!"
The happy voices cry.

Thus grew the tale of Wonderland:
Thus slowly, one by one,
Its quaint events were hammered out—
And now the tale is done,

And home we steer, a merry crew, Beneath the setting sun.

Alice! a childish story take,
And with a gentle hand
Lay it where Childhood's dreams are twined
In Memory's mystic band,
Like pilgrim's withered wreath of flowers
Plucked in a far-off land.

Prefatory Poem to Looking-Glass

CHILD of the pure unclouded brow
And dreaming eyes of wonder!
Though time be fleet, and I and thou
Are half a life asunder,
Thy loving smile will surely hail
The love-gift of a fairy-tale.

I have not seen thy sunny face,
Nor heard thy silver laughter;
No thought of me shall find a place
In thy young life's hereafter—
Enough that now thou wilt not fail
To listen to my fairy-tale.

A tale begun in other days,
When summer suns were glowing—
A simple chime, that served to time
The rhythm of our rowing—
Whose echoes live in memory yet,
Though envious years would say 'forget.'

Come, hearken then, ere voice of dread,
With bitter tidings laden,
Shall summon to unwelcome bed
A melancholy maiden!
We are but older children, dear,
Who fret to find our bedtime near.

Without, the frost, the blinding snow.

The storm-wind's moody madness——
Within, the firelight's ruddy glow,

And childhood's nest of gladness.

The magic words shall hold thee fast: Thou shalt not heed the raving blast.

And though the shadow of a sigh
May tremble through the story,
For 'happy summer days' gone by,
And vanish'd summer glory—
It shall not touch with breath of bale
The pleasance of our fairy-tale.

Conclusory Poem to Looking-Glass

A BOAT, beneath a sunny sky, Lingering onward dreamily In an evening of July——

Children three that nestle near, Eager eye and willing ear, Pleased a simple tale to hear———

Long has paled that sunny sky: Echoes fade and memories die: Autumn frosts have slain July.

Still she haunts me, phantomwise, Alice moving under skies Never seen by waking eyes.

Children yet, the tale to hear, Eager eye and willing ear, Lovingly shall nestle near.

In a Wonderland they lie, Dreaming as the days go by, Dreaming as the summers die:

Ever drifting down the stream——Lingering in the golden gleam——Life, what is it but a dream?¹

¹ I have attempted to preserve all of Carroll's formatting choices (capitalizations, spellings, dashes, indentations, etc.) in transcribing these poems from the Engage Books facsimile edition of the Alice books.

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