"That's the Effect of Living Backwards": Technological Change, Lewis Carroll's *Alice* Books, and Tim Burton's *Alice in Wonderland*

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Abstract:

Lewis Carroll's *Alice* books have enjoyed a long neo-Victorian afterlife, particularly in the cinema, and this essay examines the ways in which the books themselves encourage such cinematic endurance. Situating my reading of Carroll within the neo-Victorian context created by Tim Burton's recent *Alice* film (2010), and relying heavily on the alternative history of technological change posited by Brian Winston in his 1996 work *Technologies of Seeing: Photography, Cinematography and Television*, I argue that the *Alice* books enact a movement from the photographic to the cinematic and, furthermore, that they participated in a shifting nineteenth-century desire for – as well as anxiety over – moving pictures. Ultimately, this essay suggests that Burton's film employs a hybridisation of narrative and technology and works within a continuum of emerging cinematic processes that are always already located in Carroll's narratives.

Keywords: *Alice* books, cinema, Tim Burton, Lewis Carroll, neo-Victorianism, nineteenth century, photography, technology, John Tenniel, visual culture.

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. (Brian Winston 1996: 3)

Lewis Carroll's Alice certainly seems to have become a 'creature of society', one that is intimately bound to various forms of popular culture and to technologies that have been developed and diffused since Carroll's time. Alice is everywhere, from rock songs and graphic novels to video games and 3-D films, and her iconic presence undergoes adaptation and evolution as she continually finds her way into our world via new media. Viewed through the lens of adaptation theory, Alice is a figure whose cultural value seems simultaneously to depend upon and increase with

repeated manifestations and innovations. Her latest cinematic appearance surely exemplifies a particularly remarkable convergence between adaptation, technology, and popularity. Tim Burton's Alice in Wonderland (2010) brings Alice back – to us and to Wonderland – as a nineteen-year-old woman who must rediscover the imagination and independence, the "muchness" that marked her childhood.² 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 Carroll'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 Carroll's second Alice book, Through the Looking-Glass and What Alice Found There (1871), 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 utilises cutting-edge, hybridised animation techniques, as well as stereoscopic 3-D technology. The film was shown on IMAX screens, as well as in traditional theatres, to tremendous international response. During its twelve-week theatrical run, the film grossed over one billion dollars worldwide, an impressive feat that has been achieved by only five other films (Anon. 2010a). Employing innovations in both narrative and filmmaking, Burton's revision constitutes the current epitome of the ways in which the enormously popular figure of Alice is inextricably linked to change and to technology.

Of course, Burton's re-presentation of Alice is merely the most recent in a long line of Alice films, all of which are adaptations that make use of innovative special effects. Indeed, since Cecil M. Hepworth's eightminute cinematic version of *Alice in Wonderland* appeared in 1903, at least sixty-five interpretations of Carroll's *Alice* books have been made for the cinema or for television.³ Like the slices of Looking-Glass plum-cake that "always join on again", Alice and film constantly reconnect and, like Alice, I find this phenomenon of incessant re-attachment to be "very provoking"

(Carroll 2010: 154). That is, I think it extraordinarily curious that Carroll's Alice is so frequently joined – and perfectly fitted – to a technology that did not yet exist at the time of her creation. Nevertheless, just eight years after the Lumière brothers introduced their Cinématographe in 1895, Hepworth initiated a filmic parade of Alices that shows no sign of stopping. Burton's cinematic version of Alice will, almost certainly, not be the last; however, the timeliness of Burton's film – as well as the neo-Victorian nature of his *oeuvre* – invites us to consider not only the complexities of the role Alice plays in contemporary cinema, but also the ways in which we might engage Burton's corpus in what Dianne F. Sadoff and John Kucich call "a discussion of postmodernism's privileging of the Victorian as its 'other'" (Sadoff and Kucich 2000: xi). In part, then, this essay attempts to take a step toward establishing Tim Burton as an *auteur* whose work warrants serious neo-Victorian study.⁵

However, this essay will also investigate the plum-cake that is Alicefilm and, in true Looking-Glass fashion, it will do so in a backwards manner. In order to gain a richer understanding of why Alice continues to appear in film, we must look for the ways in which film appears in the Alice books. In a sense, I aim to reassess – or, more accurately, revise – the question raised by Garrett Stewart in his 1995 essay 'Film's Victorian Retrofit'. Rather than ask 'why now?' of a general cinematic obsession with Victoriana, I'd like to ask 'why Alice?' of a constantly recurring cinematic phenomenon. I argue that a cinematic quality permeates Carroll's narratives and lends itself well to film adaptations, particularly to those that, like Burton's, anticipate the future even as they reflect upon the past. Furthermore, I would like to suggest that the Alice books themselves materially participated in the development of motion picture technology.⁶ That is, both as stories and as artefacts, the Alice books reflect the state of the market and of society in Britain during the latter half of the nineteenth century, and this reflection reveals to us a society that was moving steadily toward "the development and diffusion of" cinema (Winston 1996: 3). Indeed, as I hope to show, a technological progression and the social implications of that progression are evident not only in the Alice books taken together, but also across the two books. As Alice moves from Wonderland to Looking-Glass Land, she moves closer to the world of celluloid and cinema.

Alice has long been a creature not only of society, but also of academia and a number of its scholarly discourses. Not surprisingly, Alice has been the particular pet of Carroll scholars who, in recent years, have worked hard to extract her from the confines of earlier research, which tended to conflate her identity with that of Alice Liddell, Charles Dodgson's young friend and sometime muse (Leach 2009: ix-x). A profusion of unquestioned assumptions paired with a lack of careful analysis have long contributed to what Karoline Leach calls the "Carroll Myth", the stifling notion that Carroll/Dodgson was fully known, that he had been figured out and that his life and work no longer warranted critical attention. Very like Burton's film, which consciously deconstructs the conflation of Alice with Alice Liddell by reconstructing Alice as Alice Kingsleigh, much of the current scholarship on Carroll/Dodgson and his works has sought to overturn the myth by reengaging with the man and with his dreamchild. Christopher Hollingsworth's 2009 collection of essays Alice beyond Wonderland, for instance, makes important headway in dismantling the Carroll Myth by painting a fuller, more complex picture of Dodgson's life and endeavours. Several of the essays comprising the collection are particularly relevant to my purposes here, as they tackle Alice's relationship with technology by focusing upon 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" (Monteiro 2009: 101). For Monteiro, Alice's Adventures in Wonderland becomes a narrative space in which Carroll 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 Carroll'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" (Meier 2009: 119). Meier considers not only Carroll's texts, but he also addresses the ways in which John Tenniel's original illustrations work to create photographic space by emphasising - in black and white - frames, twodimensionality, and subject sizes. For Meier, the visual elements of the Alice books "make the books a highly complex intermedial enterprise" that

hybridises narrative and photography (Meier 2009: 126). Hollingsworth's own contribution to the collection makes similar claims about the photographic quality of Carroll'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 undergirds the modernist exploration of mixed media, collage, and assemblage. (Hollingsworth 2009: 85-86, original emphasis)

Carroll's own storytelling and photographic practices are inextricably linked to – and, indeed, 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 and, I would add, of later postmodernist innovations, as exemplified by the work of Burton and others.

Focusing as they do upon the ways in which photographic technology – and Dodgson's use of that technology – informs the *Alice* books, the critical approaches of Monteiro, Meier, and Hollingsworth make important contributions not only to Carroll scholarship, but also to the burgeoning body of work on nineteenth-century visual and image culture, much of which emphasises the Victorians' relationships with the photograph. 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 (Heyert 1979: 142). The photograph could (and still can) both capture and misrepresent realities, and the Victorians seem to have maintained an uneasy relationship with a technology that

proved wildly popular and came to permeate their lives. Indeed, scholars such as Suren Lalvani remark upon the cultural effect of photography in terms of how the technology bolstered a particular way of seeing (Lalvani 1996). The manner in which we currently view the world and perceive its realities, in other words, has been inherited from and mediated by the photograph, the invention of which depended upon earlier paradigmatic innovations - such as that of the lens - which were always already essentially 'modern' in the sense that they could shape and manipulate vision. The Victorians acted upon the possibilities afforded by scientific knowledge in order to create devices that would allow them to meet their needs and desires; however, the adoption of innovations did not occur without disruption. Lindsay Smith claims that "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" (Smith 2008: 3). That a man-made device could replicate small-scale versions of reality and reproduce genuine 'copies' of people and things was disconcerting for the Victorian mind. Nancy Armstrong notes that, in a wider cultural context, the popularisation of visual technologies 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" (Armstrong 2000: 311). Significantly, national anxieties over popular culture are often evident in the material products of that popular culture. Carroll/Dodgson was certainly empowered by both print and photography, yet his Alice books, as we shall see, display a peculiar uneasiness over the act of looking, even as they look forward to new visual technologies. Mid-nineteenth-century Victorian "society was characterised not just by the accelerated expansion of diverse opportunities for differing sorts of spectatorship," as Kate Flint suggests, "but by a growing concern with the very practice of looking, and with the problematisation of that crucial instrument, the human eye" (Flint 2008: 2).

This essay joins such discussions of nineteenth-century visual culture by examining Lewis Carroll's place within that anxiety-ridden culture and highlighting the ways in which the *Alice* books reveal and participate in a social and technological evolution of the photographic to the cinematic. Scholars do not seem to have fully addressed the telling fact that Charles Dodgson lived during a time of considerable technological progress,

and that his birth and death years correspond almost precisely with the refinement of the camera (particularly Daguerre's) and the development of the cinema (with the Lumière brothers' Cinématographe). Dodgson, in other words, lived through and experienced a period of technological change that saw still photographs become moving pictures. He was, furthermore, an active member of the society that enabled that change. The epigraph to this essay, taken from Brian Winston's 1996 volume Technologies of Seeing: Photography, Cinema and Television, suggests that societies possess agency over the use and spread of innovations and, therefore, implies the need to engage in cultural analysis to fully understand the societal impetus for the advancement and deployment – or the disappearance – of specific technologies. Winston's work, which 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 analysing a recurring pattern of socially-driven technological change (Winston 1996: 1). In order to see how the Alice books reflect this pattern, it is necessary to outline Winston's model and the manner in which he applies that model to the development of cinema, an innovation that technically – or, rather, technologically – could have been developed and diffused much earlier than it actually was.

Working from and slightly modifying the Saussurean model of linguistics, Winston 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" (Winston 1996: 4). An initial prototypical device must be generally recognised 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 1996: 7). For Winston, the development and diffusion of technologies, particularly communications or 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 (Winston 1996: 6, 7).

In applying this rather simple model to the complex realities of the nineteenth century, Winston points out that all of the mechanical and chemical competence and components needed to produce motion picture technology were available as early as 1864 (a significant year given my argument that the Alice books both mark and enact technological change). "[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 1996: 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" (Winston 1996: 13). The Victorians, in other words, continued to be 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 scrutinised. But the supervening social necessity would eventually arise, and Winston argues that this 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 1996: 31)

The mass audiences that flocked to the ever-industrialising theatres and music halls were consuming not only traditional live action performances, but also other forms of spectacle and visual entertainment that relied on technology, including magic lantern shows, panoramas, and dioramas.¹⁰ 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, standardisation 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; "the radical potential of the cinema to destroy the theatre was contained" (Winston 1996: 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 through which Carroll/Dodgson lived, all the while engaged in his interrelated – and very visual – endeavours of telling stories, writing narratives, and taking photographs. In a sense, Carroll's own penchant for entertaining small audiences ('small' both in age and in number) converged with his tastes for (photographic) realism and narrative in the Alice books, which, once published, were made available to a mass readership. The books, then, may be read as a microcosmic site wherein the cinema began to form, and this formation reflects the wider social atmosphere of the latter half of the nineteenth century.

It is now possible to situate the *Alice* books more firmly within Winston's model and to perceive the manner in which the texts participated in the supervening social necessity that transformed still images into motion pictures. As I have mentioned previously, this pattern of technological change is evident across the two books; that is, *Alice's Adventures in Wonderland* reflects the Victorians' interest in the still, photographic image – an interest in stopping motion – while *Through the Looking-Glass and What Alice Found There* reveals a growing interest in – and anxiety over – 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 cinematic narrative in *Through the Looking-Glass*, which we shall see more fully hereafter.

Indeed, Carroll's first book is quite preoccupied with governing and arresting motion. 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. However, much of the book focuses upon the ways in which Alice's motion is impeded - or more accurately, fixed. Alice's long fall down the rabbit hole, for instance, abruptly ends "when suddenly, thump! thump! down she came upon a heap of sticks and dry leaves, and the fall was over" (Carroll 2010: 6). Once in Wonderland, Alice's attempts to follow the White Rabbit are repeatedly hindered by some new obstacle, 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" (Carroll 2010: 8). Significantly, as Monteiro suggests, the door through which she first views this 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" (Monteiro 2009: 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" (Meier 2009: 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 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. (Carroll 2010: 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, or scene, 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, Alice has a hand in developing both of these, which is, of course, messy and troubling at times.

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 far more cinematic 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 (Carroll 2010: 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. (Carroll 2010: 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 moving "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!" (Carroll 2010: 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 is an anxious hint toward the cinematic, for Alice experiences what seems, to her, the illusion of movement from a fixed position, very like a stationary viewer observing – and becoming caught up in – a motion picture. As in Carroll's first book, Alice is also the subject here: she is the motion picture 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 is metaphorically cinematic in that the squares might be read as individual frames of film through which Alice reels. She takes the train through the third square, for instance - yet another version of might be termed 'statuary' motion (i.e., moving and remaining still simultaneously), an experience that arguably prepared the Victorians for motion pictures – and eventually finds Tweedledum and Tweedledee, who "stood so still that she quite forgot they were alive" (Carroll 2010: 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" (Carroll 2010: 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 manoeuvre, as she shakes the Red Queen into a kitten "- and it really was a kitten, after all" (Carroll 2010: 216, original emphasis). Thus waking herself, Alice discovers that Looking-Glass Land, like Wonderland, had been a dream-world. 12 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 got all soft like gauze, so that we can get through" (Carroll 2010: 10), we enter the celluloid world of motion pictures where fantastical beings and scenes temporarily do become 'real'.

Carroll's texts narratively reflect the development of cinema, but they also materially participated in that development. Mou-Lan Wong has asserted that Carroll took great pains with the physical layout of his books, and she demonstrates the ways in which Carroll's text and Tenniel's illustrations "are carefully coordinated to match each other" (Wong 2009: 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. ¹³ 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" (Wong 2009: 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 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 re-action from the reader. (Wong 2009: 144)

Certainly, 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. 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.

Optical toys were wide-ranging both in their availability and in their forms. From very simple cardboard thaumatropes that, when spun, blended two separate images into one, to extremely sophisticated mechanised zoetropes that created the illusion of movement from numerous individual still images, a diverse array of visual devices could be found in the homes of many Victorians, who took delight in new and different ways of looking. Indeed, like the photographic camera, optical toys such as the magic lantern, kaleidoscope, stereoscope, and filoscope paved the way for cinema, and the

popularity of these devices within the domestic space of the household reveals a private manifestation of the supervening social necessity for cinema that took place in the public spaces of the theatre. Carroll's Alice books, relying as they did (and do) on the reader's, or perhaps more accurately, the viewer's hands and eyes, may be considered optical toys that also participated in the development of cinema. 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 Carroll'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 Carroll'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 2009: 145, original emphasis). ¹⁵ Carroll 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, a handheld cardboard wheel which was spun, significantly, in front of a looking-glass to create the illusion of movement. The Alice books' narrative and material participation in the development of cinema may also be evidenced by the praxinoscope, a device introduced by Emile Reynaud in 1877. This apparatus hybridised the earlier phenakistoscope and zoetrope, utilising mirrors to improve the illusion of movement created by the spinning of a cylinder around which a series of still images, each slightly different, was arranged. As with Carroll's Looking-Glass Land, backwards reflection creates forward motion.

We have, I think, bounded across "the last brook" and found our way to "The Eighth Square at last!" (Carroll 2010: 183). Our journey through Wonderland and Looking-Glass Land has relied heavily upon Winston's

theory of technological development and, through that theoretical lens, we have seen that Carroll's Alice books narratively and materially embody a pattern of technological change, a change that relies, particularly, on the mixing of media and the hybridisation 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" (Carroll 2010: 95). Indeed, the Alice books raise many issues that warrant examination, and Carroll/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, attributes that 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 Carroll/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 a foreign place, in which the act of looking was 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.

Indeed, our world seems fixated on how very like – or unlike – the Victorians we are. Dianne F. Sadoff and John Kucich point out that an "historical reimagining of the nineteenth century seems to be reflected in almost every domain of contemporary culture" (Sadoff and Kucich 2000: xii). The cinema is a site in which such "historical reimagining" often takes place, and much of Tim Burton's work participates in the neo-Victorian project of highlighting our continued proximity to nineteenth-century culture. Indeed, his latest directorial efforts have been, perhaps, his most explicit engagements with neo-Victorianism to date. *Alice*, of course, adapts

the works of Lewis Carroll, while *Sweeney Todd: The Demon Barber of Fleet Street* (2007) has its roots in *The String of Pearls: A Romance*, the penny blood attributed to Thomas Peckett Prest and published serially between 1846 and 1847. Similarly, the stop-motion feature *Tim Burton's*

Corpse Bride (2005) has, in Burton's own words:

a somewhat Victorian feel, because in terms of the [film's depiction of the] living world it sort of represents that kind of Victorian repression. I could understand it. Burbank [California, where Burton grew up] wasn't Victorian, but you had that kind of rigid structure of society where people are categorized and put into certain boxes, the same thing you identify with Victorian rigidity and society. *Corpse Bride* probably has even more of a flavour of that too because we did it in Britain with a large British cast[.] (qtd. in Salisbury 2006: 256)

Although Burton's comment seems to suggest that his conception is limited to a largely stereotypical view of the Victorians as a repressed people, it also – and paradoxically – recognises a commonality with them that transcends temporal boundaries. Indeed, it is a preoccupation with boundaries, with the lines drawn around "certain boxes", which steeps Burton's films in the complexities, ambiguities, and anxieties that occupy many Victorian texts. Burton's corpus reveals his interest in exploring what lay beyond and beneath the lines demarcating traditional society and societal roles. He is concerned with, to use Kate Flint's phrasing, the "borderland[s] between the seen and the unseen" (Flint 2008: 37). For Burton, as for the Victorians,

[t]he angle of vision, the point of perception, whether actual or metaphorical, is never fixed and final. [...] The idea that there may always be another way, or set of ways, of looking at an object; that there may be more to it than 'meets the eye'; that a different subjectivity will ensure that it is seen and interpreted in a different way; that new techniques of viewing will enable a different conceptualisation of the object – all these notions serve to destabilise confidence in the equilibrium of the visual world. (Flint 2008: 37)

Carroll's Alice – who so often crosses and penetrates a variety of boundaries, who is forced time and again to (re-)assess her own identity, and who is constantly seeing things from altered and destabilised points of view – is an ideal figure for Burton's cinematic treatment.

As I suggested earlier, 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 hybridising Carroll'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 1995: 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 Carroll/Dodgson, Burton celebrates – and, of course, participates in – the growth and change that Alice has undergone independently of her creator.

Carroll/Dodgson finds his way into Burton's film, significantly, as Alice's father Charles Kingsleigh (Marton Csokas). 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 "my father said he sometimes believed as many as six impossible things before breakfast" (Burton 2010: 0:6:08-0:6:11). 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" (Burton 2010: 1:25:57-1:26:03). 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" (Burton 2010: 1:20:58-1:21:01), 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 Carroll's first book. Afterward, Alice exclaims that "it wasn't a dream at all; it was a memory. This place is real, and so are you, and so is the Hatter" (Burton 2010: 1:21:48-1:21:55). 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 Carroll's 'Jabberwocky' poem. Even as its title invokes Carroll's 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 Carroll'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 authorising herself against Carroll's original narratives. 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 (Carroll 2010: 24).

Alice, who early in the film has "a sudden vision of all the ladies in trousers and the men wearing dresses" (Burton 2010: 0:6:39-0:6:43), 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 (Burton 2010: 0:21:00-0:21:01). 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.

Certainly, it might be argued that every film adaptation – and, indeed, every other cultural re-presentation - of Alice may be read as a distinctly neo-Victorian manifestation. However, as the product of an age during which momentous innovations and visual technologies were developed and diffused, it is important to examine Alice within the context of, or perhaps as, technology that survives in a number of forms and continues to exert a strong influence within present-day culture. Burton's Alice is exemplary as a neo-Victorian revision of Alice in terms of the pattern of technological change I have already explored. On the one hand, Burton's film enacts a symbolic representation of technological change 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, hybridised techniques employed in the creation of a dynamic, vibrant, and three-dimensional Wonderland, into which the viewer feels plunged along with Alice. On the other hand, Burton's *Alice*, like Carroll's Alices, encapsulates an anticipatory movement toward forthcoming technologies that have not yet undergone a supervening social necessity. We should not be surprised, for instance, 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. Like Carroll, 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 hybridised, stereoscopic 3-D films in movie theatres attests to an increasing societal demand for immersive visual experiences that are characterised 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 threedimensionality afforded by stereoscopy are firmly rooted in photographic developments that occurred during the mid-nineteenth century. Our ways of seeing, inherited from the Victorians, have been modified by the integration of depth, digitisation, 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 Carroll 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 hybridised *Alice*, both narratively and technologically, the neo-Victorian "effect of living backwards", as the original White Queen giddily explains, is "that one's memory works both ways" (Carroll 2010: 95).

Notes

- 1. For a fairly recent treatment of Alice's popular manifestations, see Will Brooker's *Alice's Adventures: Lewis Carroll in Popular Culture* (2004). For an earlier but more diverse collection of examinations, see Carolyn Sigler (ed.), *Alternative Alices: Visions and Revisions of Lewis Carroll's* Alice *Books* (1997). 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' (2000).
- 2. During the Mad Tea Party in Carroll's 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 [...]" (Carroll 2010: 109). This notion of "muchness" returns in Burton's film as an attribute that the Hatter (Johnny Depp) claims Alice has lost.

- 3. I derive this number from the Internet Movie Database (IMDb), which is generally up-to-date, though I assume that a fair number of Alice-influenced films and TV series or episodes are not included in the filmography, particularly those that may loosely allude to Alice without crediting Lewis Carroll as a writer, such as *Dreamchild* (1985) and *The Matrix* (1999). See 'Lewis Carroll' (Anon. 2010b). According to a blog posting on the Lewis Carroll Society of North America website, Marilyn Manson's *Phantasmagoria: The Visions of Lewis Carroll*, a film project that had been in production during 2010, has been suppressed by the studio due to the negative public reception of several clips. Winston's suppression of radical potential seems even to exist for the products of a given technology. See 'Marilyn Manson's Phantasmagoria disappears like a little ghost' (Anon. 2010c).
- 4. Of course, it may be argued that many other fantasy narratives are well-suited to and adapted for what Tom Gunning calls the "cinema of attractions" (Gunning 2006: 381-388), but the constant reification of Alice in the movies suggests our desire to see her again and again from new technological points of view.
- 5. Elsewhere (e.g. in a heretofore unpublished paper entitled '*The Moonstone* Before Christmas: Wilkie Collins, Tim Burton, and Neo-Victorian Sensation', presented at the national conference of the Popular Culture Association in 2010), I have further argued that Burton's conceptual and collaborative works, as well as his directorial efforts, participate in the neo-Victorian project of revealing and revising the nineteenth century. I am particularly interested in the ways in which his cinematographic vision and animation techniques rely upon Victorian texts and technologies.
- 6. The *Oxford English Dictionary* records the first use of "motion picture" in 1891, as a synonym for the kinetograph, one in a series of devices that led up to the Lumière brothers' Cinématographe.
- 7. 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).
- 8. 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 Carroll's original drawing) foregrounds this spatial limitation of a frame or box" (Meier 2009: 120).
- 9. Charles Dodgson was born in 1832 and died in 1898. A number of photographic processes were being experimented with as early as 1816, but

Louis Daguerre is generally cited as having invented the first process that became widespread or diffused, as the patents for his method of 'daguerreotyping' were purchased by France in 1839 (Winston 1996: 11-12). As previously mentioned, the Cinématographe was unveiled in 1895.

- 10. 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 1996: 24).
- 11. 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" (Taylor and Wakeling 2002: 27).
- 12. 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.
- 13. 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.
- 14. 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 2009: 102; Meier 2009: 131, n. 33).
- 15. In his preface to the 1896 edition of *Through the Looking-Glass*, Carroll 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 Carroll's profits, but the price reduction from four shillings to one very likely allowed many more children access to Wonderland. See Carroll 2004: 147-148.

16. In addition to Tenniel's illustrations, Carroll relied on strategically placed asterisk patterns to indicate motion. In *Alice's Adventures*, the asterisks often occur after Alice has eaten or drunk something. In *Through the Looking-Glass*, the wave-like pattern, which I attempt to replicate, indicates Alice's crossing of the brooks that separate squares on the chessboard landscape.

Bibliography

- [Anon.] "Alice in Wonderland" Tops \$1 Billion Worldwide'. *Get the Big Picture*, 26 May 2010a, accessed 3 September 2010, http://www.getthebigpicture.net/blog/2010/5/26/alice-in-wonderland-tops-1-billion-worldwide.html.
- [Anon.] 'Lewis Carroll'. *Internet Movie Database*, accessed 11 September 2010b, http://www.imdb.com/name/nm0140902/.
- [Anon.] 'Marilyn Manson's Phantasmagoria disappears like a little ghost', *Lewis Carroll Society of North America*, 13 September 2010c, accessed 17 September 2010, http://www.lewiscarroll.org/2010/09/13/marilyn-mansons-phantasmagoria-disappears-like-a-little-ghost/.
- Armstrong, Nancy. 'Postscript: Contemporary Culturalism: How Victorian Is It?', in John Kucich and Dianne F. Sadoff (eds.), *Victorian Afterlife: Postmodern Culture Rewrites the Nineteenth Century*. Minneapolis: University of Minnesota Press, 2000, 311-326.
- Brooker, Will. *Alice's Adventures: Lewis Carroll in Popular Culture*. New York: Continuum, 2004.
- Burton, Tim (dir.). *Alice in Wonderland*. Perf. Mia Wasikowska, Johnny Depp, Helena Bonham Carter. Walt Disney Studios, 2010. DVD.
- Carroll, Lewis. *Alice's Adventures in Wonderland* [1865] and *Through the Looking-Glass and What Alice Found There* [1871], George Stade (ed.). New York: Barnes and Noble Classics, 2004.
- Alice's Adventures in Wonderland [1865] and Through the Looking-Glass and What Alice Found There [1871]. Vancouver, BC: Engage Books, 2010.
- Flint, Kate. *The Victorians and the Visual Imagination* [2000]. New York: Cambridge University Press, 2008.
- Gunning, Tom. 'The Cinema of Attraction[s]: Early Film, Its Spectator and the Avant-Garde' [1986], in Wanda Strauven (ed.), *The Cinema of Attractions Reloaded*. Amsterdam: Amsterdam University Press, 2006, 381-388.

- _____
- Heyert, Elizabeth. *The Glass-House Years: Victorian Portrait Photography, 1839-1870.* Montclair, New Jersey: Allanheld and Schram; London: George Prior, 1979.
- Hollingsworth, Christopher. 'Improvising Spaces: Victorian Photography, Carrollian Narrative, and Modern Collage', in Christopher Hollingsworth (ed.), *Alice Beyond Wonderland: Essays for the Twenty-First Century*. Iowa City: University of Iowa Press, 2009, 85-100.
- Israel, Kali. 'Asking Alice: Victorian and Other Alices in Contemporary Culture', in John Kucich and Dianne F. Sadoff (eds.), *Victorian Afterlife: Postmodern Culture Rewrites the Nineteenth Century*. Minneapolis: University of Minnesota Press, 2000, 252-287.
- Lalvani, Suren. *Photography, Vision, and the Production of Modern Bodies*. Albany: State University of New York Press, 1996.
- Leach, Karoline. 'Forward', in Christopher Hollingsworth (ed.), *Alice Beyond Wonderland: Essays for the Twenty-First Century*. Iowa City: University of Iowa Press, 2000, ix-xiii.
- In the Shadow of the Dreamchild: A New Understanding of Lewis Carroll. London: Peter Owen, 1999.
- Meier, Franz. 'Photographic Wonderland: Intermediality and Identity in Lewis Carroll's *Alice* Books', in Christopher Hollingsworth (ed.), *Alice Beyond Wonderland: Essays for the Twenty-First Century*. Iowa City: University of Iowa Press, 2009, 117-133.
- Monteiro, Stephen. 'Lovely Gardens and Dark Rooms: Alice, the Queen, and the Spaces of Photography', in Christopher Hollingsworth (ed.), *Alice Beyond Wonderland: Essays for the Twenty-First Century*. Iowa City: University of Iowa Press, 2009, 101-116.
- OED. 'Motion picture', Def. 1, *OED Online*, accessed 12 September 2010, http://dictionary.oed.com.
- Sadoff, Dianne F., and John Kucich. 'Introduction: Histories of the Present', in John Kucich and Dianne F. Sadoff (eds.), *Victorian Afterlife: Postmodern Culture Rewrites the Nineteenth Century*. Minneapolis: University of Minnesota Press, 2000, ix-xxx.
- Salisbury, Mark (ed.). Burton on Burton [1995]. London: Faber and Faber, 2006.
- Sigler, Carolyn (ed.). *Alternative Alices: Visions and Revisions of Lewis Carroll's* Alice *Books*. Lexington: University Press of Kentucky, 1997.
- Smith, Lindsay. Victorian Photography, Painting and Poetry: The Enigma of Visibility in Ruskin, Morris and the Pre-Raphaelites [1995]. New York: Cambridge University Press, 2008.

- Stewart, Garrett. 'Film's Victorian Retrofit', Victorian Studies: A Journal of the Humanities, Arts and Sciences, 38:2 (1995), 153-198.
- Taylor, Roger, and Edward Wakeling. Lewis Carroll, Photographer: The Princeton University Library Albums. Princeton: Princeton University Library and Press, 2002.
- Winston, Brian. *Technologies of Seeing: Photography, Cinematography and Television*. London: British Film Institute, 1996.
- Wong, Mou-Lan. 'Generations of Re-generation: Re-creating Wonderland through Text, Illustrations, and the Reader's Hands', in Christopher Hollingsworth (ed.), *Alice Beyond Wonderland: Essays for the Twenty-First Century*. Iowa City: University of Iowa Press, 2009, 135-151.